Lectures
ON
INJURIES OF NERVES.

Delivered at the Royal College of Surgeons,

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LECTURE III.

SYMPTOMS OF COMPLETE SECTION OF A NERVE TRUNK.

MR. PRESIDENT AND GENTLEMEN,—The symptoms of nerve injuries of all kinds have much in common, but considering that those caused by bruising, pressure, partial division, &c., possess some points of difference from cases of simple division, I shall at present treat of the latter alone.

The *pain* caused by division of a nerve trunk does not appear to be very severe, for, judging by the accounts of patients, no further pain than that caused by the skin wound seems to attract attention in at any rate the larger number of cases. Numbness and tingling frequently cause more anxiety than does the actual pain.

The *shock* following on an injury to a nerve trunk is not a very noticeable feature in patients met with in civil practice, though Mitchell records many cases of gunshot wounds in which it was present.

The *loss of muscular power* and of the *sense of touch* are symptoms of far greater import than either of the foregoing. With regard to the former, it may be said at once that the muscles supplied by the divided nerve become absolutely powerless, and remain so as long as the divided nerve ends continue ununited; their functions may be to a certain extent supplied by surrounding muscles, as insisted on by Létiévant, but they themselves undergo a rapid atrophy and degeneration, which is the cause of many deformities, and which affords a sure evidence of the injury that has been sustained.

Sensation may be affected in many ways; there may be loss of sense, of touch, of pain, of temperature, and of weight, anæsthesia, hyperæsthesia, and various abnormal sensations, such as pricking, tingling, numbness, &c.

The *thermal sense* is generally lost in proportion to the loss of the sense of touch and over the same area; in very many cases, however, in which complete anæsthesia is not present, there is no power to discriminate between heat and cold. The amount of loss may be easily determined by making the patient dip the fingers into water of different temperatures, or else by touching the skin of the affected part with some steel implement which has been heated to a certain degree in hot water.

The *anæsthesia* which follows nerve section is generally to the patient the most obvious result of the injury he has sustained, but the exact extent to which it is present requires an immense amount of time and care to estimate. The best mode of estimating the acuteness of the tactile sense in different parts of the body is to measure the distances at which the two points of a pair of compasses can be detected as such, but, in addition, the power of localisation must be duly noted. For general purposes it is best to try roughly to find the presence or absence of anæsthesia over a given area by means of lightly touching the skin with the point of a pencil or penholder, and then proceed to map out the exact amount of anæsthesia with a pair of compasses and a rule. The patient should always be placed in such a position that it is impossible for him to see the hand of the surgeon or the area which is under observation; he should not be allowed to move the finger or other part touched, for thereby the muscular sense comes to the aid and falsifies observations; the impact of the instrument used should be very light, for, as Létiévant has shown, a patient can frequently discern friction on an anæsthetic surface by means of vibrations carried by the tissues to surrounding healthy nerves. The distances at which the points of a pair of compasses can be detected as such have been given approximately by physiologists, but are almost valueless in testing the sensation of the hand of a working man, in whom the cuticle is so thickened and horny as to be insensible to slight contact of any kind. It must also be remembered that the distance at which the two points of the compasses can be distinguished varies according to whether they are applied in the long or transverse diameter of a digit.

The readiness with which a patient can recognise *friction* when applied to an anæsthetic finger requires more than a passing notice, for it is liable to become a very fertile source of deception. I have often seen the sensory power of a presumably anæsthetic area tested by rubbing the part with the finger while the patient's eyes were averted, and almost always with the result that the stimulus was correctly perceived, and that a returning sense of touch was diagnosed by the investigator. Such a conclusion is entirely erroneous, for, as Létiévant has pointed out, any person can perceive friction applied even to the finger of another person when held between the bases of two fingers of his own hand; i.e., the vibrations are conveyed to, and appreciated by the nerves of the surrounding digits. How much more must this be the case when, as in the case of median division, healthy nerves exist on the same finger to which the friction is applied. Friction should therefore never be used as a test of sensation. For the same reason, the part which is being examined should never be pushed, or thrust away from the position in which it lies. This, I think, needs no further explanation.

If, then, the parts supplied by the terminal branches the divided nerve be tested with every care, it will before quently found they are not completely anæsthetic even cases of complete section of the trunk. A careless examination in such a case might readily lead to the belief that the nerve had not been divided, and that such operative measures as might otherwise have been considered advisable were no longer necessary. The merit of first drawing attention to this condition is due to M. Richet, in a case observed by him in 1867, and since that date the theory of nerve "anastomosis" has been so largely accepted that some authors—e.g., Létiévant, Arloing, and Tripier, and others have applied it to explain symptoms, many of which were undoubtedly due to true regeneration. Now, in far the larger number of cases it becomes very difficult to say for certain whether the power of distinguishing touch is really due to regeneration or to nerve anastomosis, and only an examination of the divided ends can set the matter at rest. In others, where the section has been very recent, and the distance separating the upper from the lower end precludes the possibility of union, any tactile sense must be referred to the influence of nerve anastomosis. On the other hand, in many cases a careless examination will lead the surgeon to the conclusion that all sense of touch is absolutely lost, and that the part is completely anæsthetic; consequently, there are not a few who deny the presence of any tactile sense in the paralysed part, and who therefore discredit the theory of "nerve anastomosis." From my own observations, I can have no doubt that in many cases of neurotomy a *complete anæsthesia* is certainly present, and that there are all grades of gradually increasing sensation, till we reach a point at which it becomes exceedingly difficult to say for certain that the tactile sense is not due to a regeneration of the divided nerve. The extent to which this supplementary sensation is developed varies according to the nerve divided, and even then is by no means constant.

There are now recorded a sufficient number of cases to render it certain that very acute sensibility *may* be retained after section of nerves supplying definite skin areas, and I will only mention that on the Continent unequivocal instances, verified in some by post-mortem examination, have been detailed by Richet, Leudet and Delabost, Baudens and Israel. Two other cases quite as interesting have been recorded in England by Savory and Butlin, and these I will venture to quote in greater detail.

In THE LANCET of August 1st, 1868, Mr. Savory describes a case of neuroma in which he excised a considerable portion of the musculo-spiral nerve with the tumour. The following is his description of the state of the parts after the operation: "From the time of the operation the muscles of the back of the forearm were paralysed, and the hand dropped forward from the wrist. But when testing the sensibility of that portion of the skin of the hand which is supplied by branches of the radial nerve, we were not a little astonished to find that it was but slightly impaired. When the skin upon the outer part of the back of the hand or over the back of the thumb and forefinger was slightly

pricked, the man cried out sharply. He could distinguish in the same region two points of contact, when they were not less than an inch apart, both in the long and tranverse axis of the hand. When they were closer than this, on any part of the back of either hand or forearm, he confused them, and, indeed, in comparing the sensibility of this region with that of the inner portion of the back of the hand and two inner fingers, or with the corresponding part of the opposite hand, no very striking difference could be detected. All portions too, of the back and sides of the middle finger appeared equally sensitive. He could distinguish also between the contact of hot and cold bodies in this region as well as in other parts. He always remarked the distinction between the touch of a cold steel sound and one that had been previously dipped in hot water. When desired to experiment on himself by touching, scratching, or pricking the different parts, he repeatedly declared either that he could perceive no difference of sensibility or that the radial portion of the dorsum of the hand was rather more sensitive than the other half. These observations were carefully repeated in various ways day after day, with a uniform result; indeed, the man at last got tired of them, concluding, no doubt, that the existence of acute sensibility had been abundantly proved. It need hardly be said that in many of these experiments the man was blindfolded and otherwise prevented from forming any idea of what we did except through the sense of touch. Now, what is the interpretation of this remarkable fact? All anatomists will agree that, so far as ordinary dissection goes, the skin on the outer half or thereabouts of the back of the hand, and of the back of the thumb, forefinger, and outer portion of the back of the middle finger, is supplied only by branches of the radial nerve; and when any variation is witnessed in the distribution of this nerve to the back of the hand, it is almost always that it supplies more than the usual portion of integument, going on sometimes to the ring finger. I cannot doubt, therefore, that in this instance the parts in question were supplied in the usual way, only through the branches of the radial nerve. But then how could these parts retain sensibility after the removal of some inches of the nerve trunk? I can only account for it thus: We know that in the forearm just above the wrist some small branches of the external cutaneous nerve communicate with the radial, and it may be that at this junction the radial receives filaments from the external cutaneous which so pass down to be distributed with the filaments of the radial even to the skin of the hand. This seems to me the most probable view of the matter—indeed the only reasonable one."

The next case was reported by Mr. Butlin in vol. xxv. of the Pathological Society's Transactions:—"D. D——, aged thirty-two, was admitted into St. Bartholomew's Hospital with a broken back, in June, 1873, of which he died three or four days after admission. There was noticed on his left arm, three or four inches above the wrist, a long oblique scar, apparently the remains of a tolerably deep and severe wound; the ring and little fingers were exceedingly contracted, the little finger especially drawn in towards the palm. Neither of them could be at all straightened; the skin covering them was tense and glazed. The muscles of the ball of the little finger were atrophied to an extreme degree, and contracted. The interossei and abductor indicis, the abductor pollicis, and the inner head of the flexor brevis pollicis were in the same condition. But, so far as could be ascertained by careful examination, there was no loss of sensation, feeling being as complete in one hand as in the other. The history which he gave of this (for he was in complete possession of his faculties until shortly before his death) was as follows:—Fourteen years previously his forearm was wounded, and he was in the hospital for fourteen weeks. At the time of admission, and for some time afterwards, the hand was 'numb' on the inside. He regained feeling in it before he went out; his fingers became drawn down afterwards. A post-mortem examination showed that the ulnar nerve had been completely divided about three inches and a half above the wrist; the upper portion was firmly united to the anterior surface of the tendon of the flexor carpi ulnaris; the lower portion was united to the same tendon, but to its posterior and external aspect. No communication whatsoever could be discovered between the extremities of the divided nerve, which were not only far apart, but also on a totally different plane. The upper portion showed very little atrophy, even when examined with the microscope. About three-fourths of an inch above its point of union with the tendon was a large bulbous swelling, similar to the swelling found at or about the ends of nerves in stumps. The lower portion of the nerve was exceedingly atrophied. Sections examined microscopically showed that it was composed almost wholly of connective tissue, but here and there could be seen small points which had deeply coloured with carmine, and which resembled axis cylinders."

The manifest care expended on a thorough investigation of the recorded cases, and the high reputation of many of the surgeons under whom the patients happened to be placed, leave little or no room for doubting the reality of the retention of a certain amount of sensation in the area supplied by the divided nerve. The more care, then, is necessary in arriving at the conclusion that in the case of any injury regeneration and reunion of the divided ends have occurred; for if the surgeon disregard the possibility of a supplementary nerve supply, he is apt to refer any signs of returning sensation to a reunion of the nerve, and not to its true cause. In addition, then, to testing the tactile power and amount of anæsthesia, it is necessary to note the presence or absence of paralysis and of trophic changes. If coincidentally with a gradually returning sense of touch the nutrition of the part improves, if previous trophic lesions pass away, and if—what is most important—the atrophied muscles resume their normal bulk, their reaction to faradaism, and their contractile power, it may fairly be considered proved that a reunion of the divided nerve has occurred. But in the absence of these additional symptoms of regeneration, *a simple return of sensation does not afford sufficient proof of new nerve formation.*

With regard to the extent to which this supplementary sensation (*sensation supplée* of Létiévant) may be present, Létiévant writes: "These supplementary sensations are very imperfect; but, in proportion to the length of time which has elapsed since the section, they undergo by use a greater development. They are modified by certain local pathological conditions. Thus, after certain nerve divisions practised chiefly for neuralgia, there is produced a sort of local stupor which masks the supplementary sensibility for a few days. Sensibility is restored as this stupor is dissipated." With these remarks, my own experience would lead me to agree, and I would only add that in other cases the supplementary sensation appears to be most marked immediately after the nerve section, and that it subsequently disappears. The manner in which this supplementary sensibility is kept up is thus stated by Richet: "As both the loops and filaments which end in the touch corpuscles are compound, containing fibres from the median, radial, and ulnar nerves, section of one of these trunks is powerless to deprive of sensibility the corpuscles, which are the essential organs of touch." This is *à propos* of a division of the median. Arloing and Tripier in the *Annales de Méd. Vét.*, 1876, express much the same opinion, and state that after division of three out of the four collateral nerves on the toe of a dog, sensibility still remains, but is destroyed by dividing the other nerve. This, however, is certainly not applicable in its entirety to the human subject, as there can be no doubt that in many cases—e. g., after division of the median at the wrist—the fingers are in parts frequently entirely anæsthetic. Israel in the case quoted by him is inclined to ascribe the cause of the supplementary sensation to a chance union of the proximal ends of the injured nerves with another nerve which was yet intact; this condition, however, is not essential for the presence of supplementary sensation. Mr. Savory, with more probability, refers this condition to what I may call the "coarse anastomoses" in contradistinction to Richet's explanation; and in the case of injury to the musculo-spiral, on which he bases his arguments, instances the union of small branches of the external cutaneous with filaments of the radial nerves. No difficulty need be found in accepting either Richet's or Savory's explanation. It has been proved that the nerves can transmit currents equally well in either direction; and considering the comparatively small bonds of union which exist, and the fact that they do not enlarge as do the collateral vessels after ligature of an artery, the imperfections of the supplementary sensations will not excite surprise.

In addition to simple inability to perceive the contact of various bodies with the skin, there is often found a want of power to localise correctly the exact spot touched. Frequently a patient will perceive that some part of the hand is being touched, but on being asked to name the finger or spot of contact he makes mistakes. Thus, on pricking the back of the finger he fancies that it is the front which is

being experimented on, or else another finger, or even the palm or back of the hand. There seems to me to be no particular law as to this transference of sensations; sometimes the patient fixes on a spot which is really devoid of sensation, at other times on a sound digit.

The sense of pain as evinced by pricking or pinching is generally lost in proportion to the amount of anæsthesia, but in a considerable number of cases all sense of pain is absent, and yet there is not complete anæsthesia. The reverse is rarely the case. In my opinion this is due to the fact that a more intense impression is necessary to give rise to pain, and that a proportionately perfect nerve supply is requisite, while the sensation of touch can be more or less clearly perceived even when the nerve paths are more or less damaged. In rare cases the skin may be in a hyperæsthetic condition; this I think only occurs in cases of incomplete section, in conjunction with neuritis as a rule, but sometimes apart from this in the *neighbourhood* of trophic lesions.

The *muscles* supplied by the divided nerve are paralysed by its section, and the subsequent changes that take place in them have been already described. It remains, however, to notice the deformities which result from their atrophy. The exact method by which the altered condition of a muscle after nerve section causes contractions and deformities appears to be very imperfectly understood. It is generally spoken of as if it were an active contraction either of the muscle itself or else of the degenerated tissue which takes its place. I believe that this view is not correct, and shall endeavour to prove my assertion. The muscle undergoes atrophy; it shrinks and grows smaller in every diameter, but not with any degree of force sufficient to cause actual deformity. No; the whole secret of the process lies in the fact that *the muscle shrinks only so long as it is unapposed.* If, therefore, its origin and insertion be unduly approximated *during the process of atrophy*, they will remain in such a condition when the atrophic changes have ceased, not because they have been drawn together by such changes, but that the atrophy found them in a certain position and fixed them there. For instance, after section of the median nerve in the upper arm it is very common for permanent flexion of the digits to ensue, but the reverse is not the case after the division of the musculo-spiral; the fingers and wrist are not then extended, but, on the contary, are flexed. Whence the difference? I think it is easily explicable. When the hand is paralysed, or when it is simply not in use, the fingers naturally lie in a position of flexion, and in this position they are gradually fixed by the atrophic changes. There is evidently no active contraction, for if it occurred in the flexors in the case of division of the median, the same result ought to follow in the extensors on section of the musculo-spiral, and hyper-extension of the fingers and wrists would result. This condition is prevented, however, by the naturally bent position of the hand, and by the frequent exercise of the flexors. Similarly, after infantile paralysis the most common deformities are equinus and bent knee. But in many cases the whole of the muscles of the lower extremity are equally paralysed. Why, then, are not the leg and foot sometimes extended? Simply for the very good reason that both of them, either in sitting or walking, but more especially the former, naturally fall into the position in which they are subsequently fixed by the shrinking of the muscles, which occurs at a period when from the nature of the illness the patient is kept from active exercise.

I am, then, very strongly of the opinion that the "irresistible power of contraction of the paralysed muscles" described by some authors has no existence in fact, but am quite willing to allow that when shrinking has once occurred the muscles cannot be artificially restored to their normal length. There is, however, one form of active contraction which is sometimes very troublesome—namely, that which is due to the unbalanced action of the unaffected muscles; it may produce a real deformity, though not, I think, very frequently.

The changes in the electric irritability of divided nerves appear to commence very early after section. MM. Cossy and Dejeune found that after section of the sciatic in guinea-pigs, the excitability of the peripheric segment is diminished on the second day, and after the third is entirely lost. Lœgard (in the *Archiv für klin. Med.*, 1880), says that at first the irritability of the divided nerve—i.e., of its distal end—is slightly increased in some cases, but not constantly; and he agrees with the above observation, that by the third day it no longer reacts to electricity.

The electrical condition of the muscles has been already referred to in speaking of trophic changes, and the extent to which a muscle will respond to electrical stimuli after nerve lesions has been made by some authors a point of great importance in the prognosis of such injuries. It must not, however, be thought that the absence of all reaction to the proper stimuli in any way indicates that motion is permanently lost, for, as we shall see presently, if the continuity of the nerve be re-established, regenerative changes will take place in the muscle, at any rate for a considerable time after the date of the original lesion. But although the failure of a muscle to react to electrical stimuli is not by any means to be considered an indication that it is beyond recovery, the behaviour of the muscle to the electric current nevertheless affords the most valuable evidence as to its connexions with its trophic nerve centre. On examining a muscle in a natural condition with a galvanic current, it will be found that the kathodic closure contraction (K.C.C.) is greater than the anodic closure contraction (A.C.C.), a condition which is briefly expressed by the formula K.C.C. > A.C.C.

It has been shown by Erb[1] that in a muscle separated from its motor nerve this reaction undergoes a marked change, the A.C.C. becoming first equal to and then greater than the K.C.C., a reaction which, together with other electrical conditions, goes to make up the so-called "reaction of degeneration." This alteration in the electrical irritability of the muscle is well and briefly put by M. Nicaise.[2] He says: "During the first fifteen days the faradisation curve becomes gradually depressed. After the third week the muscle is no longer excitable, at least through the skin. Towards the sixth week, in favourable cases, the excitability reappears, and gradually increases until it reaches the normal reaction. But the galvanisation curve follows an entirely different course. During the first fifteen days it follows the faradisation curve; but from the third week, when the interrupted currents have no longer any effect, the galvanic reaction is exaggerated, the curve is raised, soon exceeding the normal, and reaches its maximum when the other is at its minimum. At the moment that repair begins to take place the phenomena follow an inverse order; and at the same time that the faradic curve is raised the galvanic curve is lowered, and both gradually return to the normal level. If, instead of a favourable case, we suppose a case in which the regeneration of the nerve does not occur, there is no ascent of the faradic curve, and the galvanic curve, after being elevated, falls again to the normal, and then continues to sink until the reaction becomes *nil*."

The above paragraphs form a very accurate summary of the conclusions arrived at by Erb and other experimenters. The care with which the results have been recorded leave no doubt in my mind as to the accuracy of the observations, and it only remains to notice, before proceeding further, that these conclusions are the result of experiments on animals, and not of clinical observations on man. These experiments I have not myself repeated, both on account of the difficulty encountered in carrying them out in this country, and also because I have no doubt that the conclusions arrived at are correct. Moreover, inasmuch as I am interested more particularly in the nerve injuries of man, I have found that I could better occupy my time by examining the electrical reaction in the muscles after nerve injuries such as are met with clinically. And here I would point out again that the changes that occur in the nerves or in the parts supplied by them, as noted by experiments on animals, do not necessarily find their exact counterpart in similar conditions in man. This is a point that is duly appreciated by Nicaise, who says, after concluding the paragraph I have quoted, "Do the same phenomena occur in man as in animals which are made the subject of experiment? Precise observations are not sufficiently numerous to permit this fact to be definitely affirmed. A minute study of these electric phenomena in the traumatisms of nerves is, then, necessary before we can apply in all certainty to man the results observed in animals."

With this I entirely agree, but have so far searched in vain amongst the now numerous recorded cases of nerve injury for any information on this point. My own observations, however, lead me to disagree with Erb, in some particulars at least, and I would take the present opportunity of acknowledging the valuable assistance I have received in the examination of patients from Dr. Steavenson, electrician

[1] Handbook of Electro-Therapeutics.
[2] Article in Ashurst's Encyclopædia of Surgery, vol. iii.

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to St. Bartholomew's Hospital. I have found that in cases of nerve section in man the faradic excitability of the paralysed muscles has disappeared with much greater rapidity than in animals, for, whereas Erb states that it gradually fades and finally disappears in the third week, I have found absolutely no reaction to the strongest currents as early as the third or fourth day. In one case only excitability persisted until the eighth day.

With regard to the galvanic current, there is, again, a marked difference between the conditions in men and animals. In the latter the galvanic irritability of the muscles is said to become greatly increased at the second week, and in the third week the excitability is so great that contractions are excited by the current evolved from only two or three cells. Such is not my experience. I have never seen but once, and then it was doubtful, the least increased excitability. On the contrary, I have found that the galvanic irritability diminished rapidly, so that in two or three weeks, at a time when theoretically excitability should be at its height, strong currents produced but slight fibrillar contractions, which were also very slow and wavy. And, whereas by experiment the date of the final disappearance of galvanic excitability has been fixed at about eight or ten weeks, I have found it to vary in man from about the third to the sixth week.

With respect to the alterations in reaction to the kathodal or anodal closure currents, my own observations are in accordance with those of others. In about a week or ten days I have found that the anodal closure contraction was either equal to or greater than the kathodal closure contraction. This reaction is of great value from a diagnostic point of view, and is also most reliable. Considerable care is nevertheless requisite in investigating the affected muscles.

The next point for consideration is the permanency or otherwise of these altered reactions. Supposing that at the end of a few weeks all electrical excitability has disappeared in the paralysed muscles, when must we look for its recurrence, and in what way does its absence influence the prognosis? To this it may be answered that, if the divided nerve does not reunite, the electrical irritability will not return; but that, if it does reunite, *voluntary power will return before electrical excitability.* The first sign of repair as regards the muscles must not, then, be looked for in the electrical reactions, but in the return of function; and the continued absence of electrical irritability is not to be looked upon as sufficient ground for a bad prognosis. Voluntary power often returns many months or even a year or more before electrical excitability—a fact which is difficult to explain, but of which I cannot have the slightest doubt.

Does faradic or galvanic excitability return first? I cannot answer this question quite so definitely as some of the others. In some cases both have returned at the same time; in others the muscles have contracted to the faradic current whilst yielding no response to galvanism. I have never seen galvanic irritability return before faradic. In most of the cases I have observed, the galvanic reactions, when they first reappeared, were normal in quality; but in one case, where they did not return until six months later than the faradic reaction, the reaction of degeneration was well marked. The following notes of cases illustrate most of these points.

CASE 1.—James D——, aged thirty-four, divided his ulnar nerve on April 7th. 9th: No reaction to faradism of ulnar muscles; good reaction to galvanism of ditto. 14th: No reaction to faradism; very slight reaction to galvanism.

CASE 2.—Geo. H——, aged thirty, divided his ulnar nerve on May 8th. 11th: Muscles supplied by ulnar nerve react to faradism; galvanic current, A.C.C. = K.C.C. 13th: Complete loss of faradic contractility in all muscles supported by the ulnar nerve; very slight reaction to galvanism.

CASE 3.—Emile M——, aged forty-seven, divided his ulnar nerve at the elbow on Feb. 22nd, 1884. 25th: Faradic current; no reaction of muscles supplied by ulnar nerve.

CASE 4.—John S——, aged thirty, divided his ulnar nerve at the wrist on Feb. 23rd, 1885. 24th: Faradic current; all muscles react. Galvanic current, K.C.C. > A.C.C.; no increased irritability; ulnar muscles paralysed. 26th: Faradic current; slight reaction of interossei. Galvanic current, A.C.C. = K.C.C.; no increased irritability. 27th: No change. 28th: Faradic current; marked diminution of excitability. Galvanic current in third interosseous muscle, A.C.C. > K.C.C.; other interossei as before. March 1st: Faradic current, only the faintest contraction. Galvanic current, A.C.C. > K.C.C. 4th: No reactions to faradism. The faintest tremor to galvanism.

CASE 5.—Henry B——, aged forty-seven, divided his ulnar nerve on Feb. 6th. 20th: Complete loss of both faradic and galvanic contractility.

CASE 6.—Annie B——, aged twenty-seven, divided her median nerve at the wrist on September 27th, 1885. On account of her hand being entirely covered with antiseptic dressings I was unable to examine the condition of the muscles until the third week. On October 20th there was found to be no reaction to faradism in either the opponens or abductor pollicis. The same muscles gave the reaction of degeneration to the galvanic current (A.C.C.>K.C.C.), but instead of there being marked excitability there was great loss of galvanic irritability, and the contractions were slow and wavy. Oct. 30th: The muscles supplied by the median nerve require eighteen more cells to cause a contraction than do those of the other hand, and then scarcely react.

It will thus be seen that after nerve section the paralysed muscles usually fail to contract to the faradic current after the third or fourth day. That at the same time, tested by the galvanic current, A.C.C. = K.C.C., and later on A.C.C.>K.C.C. In from three to six weeks there is complete loss of all electric excitability.

In support of my statement that voluntary power returns before electric excitability I append the following extracts from cases I have observed:—

CASE 1.—J. C——, aged seventeen, divided his musculo-spiral nerve on March 25th, 1883. On April 28th the operation of secondary suture was performed. On July 27th there was some return of power in the previously paralysed extensor muscles, but no return of electric excitability. On Nov. 16th there was almost perfect restoration of power, but no reaction to galvanism or faradism. On March 25th, 1884, one year after the injury, there was complete restoration of voluntary power, but still no electric excitability. Oct. 9th, 1884: Wrist extensors and extensor ossis metacarpi pollicis react to faradism and galvanism, but the extensors of the phalanges of the fingers and thumb do not react.

CASE 2.—T. M——, aged twenty-four, divided his median nerve on July 20th, 1882. On May 5th, 1883, the divided ends were sutured. Nov. 26th, 1883: Return of power in opponens and abductor pollicis. No reaction to galvanism or faradism. March 28th, 1884: Muscles quite as good as on other hand; very slight reaction to a strong faradic current. Sept. 22nd, 1885: Reactions normal to faradism and galvanism.

CASE 3.—W. W——, aged nineteen, divided his ulnar nerve at the wrist. Seven months later the divided ends were sutured. In five months there was a return of voluntary power in the interossei and muscles of the ball of the little finger. A year later this hand was quite well, but there was yet no reaction to electrical stimuli.

CASE 4.—C. R——, aged eleven, divided her ulnar nerve in the forearm. Three months later secondary suture was performed. Muscular power began to return in about eighteen months. Six months later the muscles supported by the ulnar nerve reacted to faradism, but not to galvanism. After an interval of another six months galvanic irritability was restored, but the reaction of degeneration was well marked.

RESECTION OF AN IRREDUCIBLE AND GANGRENOUS INTUSSUSCEPTION.

WITH A CONSIDERATION OF THE TWO CHIEF METHODS OF TREATMENT: INFLATION AND ABDOMINAL SECTION.[1]

BY LAWFORD KNAGGS, M.A., B.C. CANTAB., F.R.C.S. ENG.

THE patient, aged five years and a half, a strong healthy boy, had been suffering from a cold for a week. His appetite had been small, and the bowels had not acted satisfactorily, a scanty evening motion taking the place of the usual morning one. On November 9th he came down to breakfast, looking pale and complaining of stomach-ache. A domestic aperient was administered, and after breakfast he vomited; but the bowels being moved only twice, and very inefficiently, a second aperient was given, and immediately vomited. The pain continued, and was

[1] Read before the Leeds and West Riding Medico-Chirurgical Society, February 4th, 1887.

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subsequently described as of a spasmodic character, but not very severe. The vomiting became frequent, and any attempts to take food caused retching. I saw him in the evening. The vomited matter was white and frothy. In the right iliac fossa could be felt what seemed to be thickened and solid coils of intestine, unlike anything elsewhere. The spot was tender, and to it he referred his pain. As I was manipulating these coils something seemed to move under my fingers, and I was unable afterwards to distinguish what I had previously felt. The manipulation gave pain, and caused retching. Temperature 98°; pulse 90. I concluded that what I had felt was probably an intussusception which had resolved under manipulation, and I ordered four minims of tincture of opium in one drachm of water every four hours; no food to be taken by the mouth. I saw him again later, and, the vomiting and pain continuing, I substituted subcutaneous injections of morphia with atropine for the opium. The tumour had not reappeared.

Nov. 10th.—Vomiting stopped after the subcutaneous injections, and he had slept fairly during the night. There was now a lump on the right side below the umbilicus, dull on percussion, somewhat pear-shaped, with the stalk sloped towards the right flank. It could not be indented by pressure; it was tender. There was no action of the bowels, but flatus had been passed. The rectum was empty. A very small quantity of urine had been voided. Tongue moist. Temperature 98°; pulse 100-110, good. The dose of morphia and atropine was increased, and he was kept well under its influence throughout the day, being allowed beef-tea by the mouth, but fed regularly by the bowel. In the evening he vomited some brown-looking fluid not unlike beef-tea—not offensive. The lump remained unaltered, and showed through the rectus as a prominence.

11th.—Passed a good night; pulse 120; tongue moist; no vomiting. Tumour less distinct, but perceptible and dull. The A.C.E. mixture was administered, and the bowel inflated with Lund's insufflator. Air could be felt under the fingers placed upon the tumour; this disappeared gradually, and the abdomen became generally distended and resonant, but there was no feeling suggestive of resolution having taken place. In the afternoon Mr. Teale and my father saw the case with me. All doubt as to the nature of the tumour had been set at rest by the passage of a pint of fetid dark-brown liquid fæces, having a reddish tinge due to blood. It was thought to come from above the obstruction, and, in the absence of any distinct tumour, to indicate that probably partial or complete reduction had resulted from the inflation. The operation therefore was to be repeated in the morning. The child passed an easier night under the morphia and atropine, but woke every half hour, complaining of "that awful pain." Two motions of the same dark fetid character, but now containing mucus as well as blood, were passed.

12th.—He is evidently worse. Pulse 140, compressible; tongue dry, slightly brown, and covered with sordes; features pinched. Inflation was repeated, but with no more satisfaction. With a view to operation, he was now fed by the mouth; so that with nutrient enemata, each containing one drachm of brandy, every three hours, and champagne, brandy-and-water, calves' foot jelly, chicken broth, and essence of beef by the mouth, he had taken a considerable amount of nourishment and stimulants before he was again seen by Mr. Teale at 7.30 P.M. His condition then was much improved, but his pulse was 146, his temperature 99·4°, his tongue dry, and he was incoherent and rambling. He had passed another liquid motion containing more blood and mucus than the previous ones, and much more offensive.

It was now thought that the risks were greater if no interference was attempted, and so it was decided to operate, and if it became necessary to remove the intussusception to attach the open ends to the abdominal incision in order to economise time, and so tend to lessen the shock. With Mr. Teale's assistance, my father giving the anæsthetic—A.C.E., for which ether was eventually substituted,—I opened the abdomen by a median incision three inches long, and at once found the tumour lying rather deeply on the right side. There was considerable difficulty in getting it to the surface without undue traction, and when this was accomplished nothing could be made out until the whole mass was drawn outside the abdomen. It was nearly a foot in length and curved, and proved to be an intussusception into the small intestine, in which it was very tightly strangled, the outer layer being arranged around the upper part in collar-like rolls. The intussusception passed through the ileo-cæcal valve, and for three or four inches into the large intestine. It was quite loose here, and for two or three inches in the adjoining part of the ileum, and it could be easily pushed back at this part, but the mass was so tightly gripped above, that prolonged and steady traction, both at the upper and lower ends of the tumour, had not the least effect upon it. Moreover, there were several dark-coloured patches upon the outer layer, where the pressure was greatest, suggestive either of gangrene or blood beneath. The attempt to reduce the invagination was abandoned, and the intestines protected by lint wrung out in carbolic lotion. Following a suggestion of Mr. Teale's, with the object of saving as much bowel as possible and avoiding a subsequent union of small with large intestine, I made a transverse opening in the ileum three inches above the valve, and through this pulled out the lower part of the invagination. A ligature was applied to it high up and the free end removed; it was black and offensive. I then found that there was a small perforation about an inch below this incision through which blood and mucus could be squeezed from inside, so I made the section of the gut an inch nearer the colon than I had intended. Before doing this I clamped the bowel above and below the invagination with Treves' clamp, and ligatured the mesentery to the tumour half an inch from the bowel with five or six ligatures. The tumour was then removed between the clamps and its attached mesentery cut through. At this stage the patient's state became very serious, and it was deemed advisable to conclude matters as quickly as possible. The upper end was attached to the abdominal incision by deep sutures passed through the abdominal wall, and the peritoneal and muscular coats of the bowel, and by superficial ones between the skin and the mucous membrane. To do this the clamp had to be removed, and the open end was held by a pair of Knowsley Thornton's pressure forceps, an instrument that proved extremely useful, completely closing the gut and allowing it to be manipulated quite out of the way of my fingers. On removing it to put in the superficial sutures, a small piece of sponge effectually prevented any escape of fæces. The lower end was then fixed, the incision closed, a dressing applied, and the child put back to bed. He was then pulseless, but soon came round from the ether, and after stimulant had been administered by the bowel and under the skin, a small pulse could be felt. He was very restless, never rallied, and died about an hour and a half after the operation.

The success that has attended inflation in cases of intussusception has been so satisfactory that it is not surprising it has now become recognised as the first operative procedure which should be attempted. The ease with which it can be carried out, the simplicity of the means for its performance which can be so readily extemporised, are likely to render it a very popular method with practitioners, who may be so situated as to be beyond reach of the ordinary hospital requisites needed for serious operations. A clear appreciation of the dangers to which any operation is subject by no means makes it less useful, but rather enhances its value by ensuring a more thoughtful intelligence in its performance. I feel therefore tempted to try to bring out clearly the dangers to which forcible distension of the bowel by air or water is liable; the more so because of the usual text-books Fagge's "Medicine" is the only one in which I have found special reference to them, and I believe that there exists a very general opinion that if inflation does no good, at least it can do no harm. The following eight cases show that there are two great dangers in the operation: injury to the bowel, even to the point of rupture, and shock:—

CASE 1. (Mr. Bryant.)—Boy, aged six months. During inflation the abdomen became generally distended; no air escaped per rectum. The child became almost pulseless. Post-mortem: Fæcal extravasation. "The left half of the transverse colon and splenic flexure were constricted and perforated." A second opening was found lower down in the sigmoid flexure. (Harveian Lectures, 1884. This is probably the same case as that alluded to by Dr. Fagge and Mr. Howse in the Med. Chir. Trans., vol. lix.)

CASE 2. (Mr. Symonds.)—Boy, aged five months. During inflation the abdomen became suddenly distended, and when opened brownish mucus was found inside the peritoneal cavity. Perforation had occurred in a portion of the invaginated bowel, which was easily reduced. (Not published.)

CASE 3. (Mr. John Thomas.)—Boy, aged five months. The tumour could be felt per rectum. About nine ounces of water were injected, when a rumbling noise was heard in the abdomen. No air returned. Post-mortem: In the pelvis

was half a tumblerful of water. (THE LANCET, Dec. 25th, 1886.)

CASE 4. (Dr. Tyson.)—Case where oil was found in the abdominal cavity after death. (*Brit. Med. Jour.*, Dec. 3rd, 1881.)

CASE 5. (Dr. Moxon.)—Child, aged seven months. After inflation and enemata the colon had partially given way in several places. (Med.-Chir. Trans., vol. lix. Probably the same case is recorded by Mr. Bryant in the Harveian Lectures.)

CASE 6. (Mr. Bryant.)—Boy, aged seven months. The bowel between the intussuscepted portion and the sigmoid flexure was partially ruptured in many places. The peritoneal covering was cracked and turned out, and in the sacculi the longitudinal muscular fibres were torn and the transverse separated. (Harveian Lectures.)

CASE 7. (Mr. Bryant.)—Child, aged seven months. The bowel was inflated, and the child became collapsed, convulsed, and died. (Harveian Lectures.)

CASE 8.—Dr. Fagge and Mr. Howse mention a case of an adult in which a large injection of seven pints injudiciously administered was supposed to have caused the death of the patient. (Med. Chir. Trans., 1876, vol. lix.)

In one only of these cases was the age not stated, but of the remaining seven it is interesting to note that in all three cases in which rupture occurred the age of the patient was only a few months; that the two in which the bowel was seriously injured were only a month or so older; and that six of the seven in which harm resulted were children less than eight months old. Admitting the greater frequency of invagination in young children, these figures point strongly to the conclusion that the intestines of infants are not well suited to bear great distension. Nor is this astonishing when we bear in mind their thinness and delicacy.

What bearing have these facts upon the question of the administration of an anæsthetic during inflation? In adults anæsthesia is dispensed with, that the operator may obtain information from the sensations of his patient and regulate the continuance of the operation by them; but in infants insensibility is usually deemed advisable to ensure the proper application of the method, and by the abolition of spasm to improve the chances of its success. Admitting that a surgeon is not likely to obtain much information from the intelligent co-operation of a conscious child forcibly subjected to inflation, yet if it is anæsthetised there is the very obvious danger that the distension may be carried to too great an extent in consequence of the inability of the patient to feel or to express any discomfort. Now it has been pointed out that to employ inflation when sloughing of the invaginated gut is in progress is sure to result in disaster; but in considering the applicability of this method to any particular case, it is necessary to bear in mind that the only certain sign of sloughing is the passage of portions of gangrenous gut, that acute symptoms do not mean the onset of gangrene, but probably the commencement of conditions which will end in gangrene if the patient survive long enough, and that in cases in which gangrene has been supposed to exist the facts have as often as not been found to belie the supposition. The operation, then, is only contra-indicated in those cases in which there is certain evidence of sloughing in the passage of portions of gangrenous intestine. Sometimes, quite distinct from gangrene of the invaginated intestine, there are other conditions of the tumour, or having some connexion with it, which predispose the patient to suffer injury from forcible distension of the bowel. Such conditions are gangrene, ulceration, and perforation of the outer layer from outward pressure of the tumour, or ulceration of a neighbouring part of the bowel, a not very uncommon accompaniment of intussusception, and which is sometimes thought to be the exciting cause, and at others may be produced by the invagination. The following instances will illustrate these conditions:—

CASE 9. (Dr. Charlewood Turner's case.)—There was found ulceration of the cæcum, into which the apex of the tumour had passed. (Path. Soc. Trans., 1881.)

CASE 10. (Mr. Henry Morris's case.)—On the sixth day the outer layer of an intussusception of the small intestine was found gangrenous from pressure, and almost perforated in three or four places. (Path. Soc. Trans., 1877.)

CASE 11. (The case reported above.)—On the fourth day a minute perforation existed in the outer layer at a place where the tumour was easily reducible, and several places very suggestive of commencing gangrene where the invagination was tightly grasped.

Though perforation in Dr. Turner's case did not take place till three days after the employment of large injections had been discontinued, yet their existence must have rendered forcible distension a very hazardous proceeding, and I feel that it was a piece of good fortune that no harm resulted in my own case.

(To be concluded.)

ON THE

CHEST DISEASES AFFECTING WORKMEN AT COPPER WORKS.[1]

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I HOPE I shall meet with approval in bringing before the notice of the profession a diseased condition with which many practitioners are brought into occasional contact, and which forms a large part of the practice of others who, like myself, are engaged in attendance on persons who labour in one of the special industries of this country. I allude to the chest complaints set up in those who are employed in the manufacture of copper and yellow metal—staple industries of the town of Swansea and its neighbourhood. I am compelled to adopt a somewhat indefinite nomenclature for the title of my paper, because, by the very nature of the pathological changes induced in the chest primarily, and in the general system secondarily, I am prevented from giving a definite title to the matter under consideration. Thus, for instance, I should be failing in my purpose were I to speak of chronic bronchitis, or of chronic interstitial pneumonia, and so on, when dealing with the matter at issue; for either of these diseases, alone or together, form only links in the chain of morbid conditions which are set up by the pulmonary irritations caused by the oft-repeated inhalations of noxious substances, whether gaseous or mechanical, which act as the irritants and disease-producers amongst the workmen who labour under such exposures. Indeed, for many years past, I have been in the habit of alluding to the cases which form the subject matter of this paper as examples of "copperman's chest," a title which perhaps fails to convey to the uninitiated any sense of pathological entity, but which is sufficiently comprehensive to carry with it to the minds of students a knowledge of what condition the sufferer is in. I venture to say that no practitioner who has the care of workmen engaged in the manufacture of copper will disagree with me in thus denominating a class of disease with which he is brought into familiar contact.

What, then, may one expect to find in the "copperman's chest"? Two things will always be found, at least; and these two things are bronchial disease and interstitial pulmonary change, both more or less pronounced in character. As time progresses other organs than the lungs become affected, and the sufferer presents a very storehouse of symptoms for the consideration of his medical attendant. I think I shall best deal with the matter by a description of a patient of mine who is now under my treatment, as his case is a very typical one and well adapted for my purpose.

S. T—— is now fifty-six years of age, and has been engaged in copper works since eight years old. He has always been a very steady and abstemious man. He started as a labourer's help, became a labourer engaged in discharging coal and ore, moved on to be a furnace-man, then worked in the refinery, and finally became what is known as a "gaffer" or foreman. His family history has a well-marked phthisical taint in it. At different periods he contracted colds like other people, and the colds always affected the chest; but there was nothing notable about this circumstance until the last ten years or so, since which time he has been more or less a sufferer from cough and shortness of breath. During this period his colds would take the course to which I am now well accustomed in men of his class—viz., they would be characterised by chronicity of process and by resistance to ordinary remedies for that class of disease. For some years past he has never been free from some shortness of breath and cough. For the past twelve months he has been quite unable to work, as he has suffered from

[1] A paper read at the Swansea Medical Society on October 29th, 1886.

increasing shortness of breath with dyspnœa on exertion, from asthmatic attacks, from drenching perspirations by day and by night, from great disinclination for food and inability to digest the same, and from constantly increasing weakness as a result of those troubles. The heart beats feebly and frequently in its efforts to pump the blood through the lungs, and, under the presence of constantly increasing resistance there, has become overloaded, so that its right side has failed to empty itself, and there is venous regurgitation. The stomach and other abdominal viscera, being overloaded with retarded blood, and so passively congested, are affected with catarrh, and the kidneys are with difficulty excreting a scanty urine, which is loaded with albumen. S. T——'s case is on all fours with many others that I have witnessed, and, in reply to my frequent advice that he should shift his quarters and his employment at an early period in treatment, I have been told, "What can I do, sir? I am too old now to start afresh, and my state of health is not such as to commend me to any other employers of labour than those for whom I have worked for many years past." And so it happens that the sufferer drifts into the condition of confirmed and fatal disease.

I have said that all the cases present at least two conditions—viz., those of bronchitis and chronic interstitial pulmonary changes. There is a wide variance, however, in the type of the former complaint. With many persons the bronchitis remains to the end the main morbid condition, and loud rhonchi—sonorous or mucous in character—indicate the chief foci of disease. This bronchitis becomes chronic, and, emphysematous changes occurring in the lungs, the tubes yield here and there, and form large bronchiectatic cavities, from which great quantities of offensive sputum are discharged at different times. The condition is one which is prone to mislead inattentive observers, who are apt to regard the bronchiectatic cavities with their surrounding layers of condensed lung tissue as being vomicæ caused by the ravages of tubercular phthisis. But the extensive character of the morbid condition, as well as the duration of the disease, and the concomitant conditions of emphysema and cardiac trouble, are sufficient to negative such a view of the case, even if we exclude the information given us by careful physical examination of the patient. One such patient as I have now been describing died under my care last year. For many years past he had been confined to the house in the winter months suffering from dyspnœa, gastric catarrh, and all the bronchial disease just spoken of. With the first cold winds of the year he would be affected, the breathing at once becoming much obstructed, the cough gaining rapidly in force and frequency, and the attacks of dyspnœa becoming more and more severe, until orthopnœa would declare itself and he would have to pass the greater part of the twenty-four hours in a sitting position. Here, as with S. T—— and all my other patients affected with the disease, the heart became more and more affected with incapacity to pass the current of blood through its chambers, and so there ensued venous engorgements and dropsical affections. This heart failure plays a most important part in the later stages of illness, and in by far the greater number of those under my observations has been the immediate cause of death, through asthenia and syncope.

I will now deal with the question of the alterations in the lungs proper, which at all times are to be found in these cases. I would premise that the changes in these organs are not secondary to inflammatory attacks there, either as lobar or lobular pneumonias, but that they are from the first a prominent feature in the chest symptoms complained of by the sufferers. In the early stages of illness, occurring, for most part, many years before the patients are reduced to a condition of permanent invalidism, one finds on auscultation marked increase of duration in the expiratory breath sound, with a lessening of the volume of the respiratory murmur generally. It is very evident that the normal elasticity of the lung tissue is impaired. This impairment, once produced, remains as a permanent condition, and it needs only a catarrhal influence, whether atmospheric or irritant, to throw the whole breathing apparatus out of gear. I know a number of workmen who are sure to appear at my surgery on the first frost or prevalence of east winds, suffering from severe cough with difficulty of breathing, and these men are the ones affected in the way I have just described. Under the influence of these miserable circumstances the sufferers become, as a rule, despondent and bad-tempered. I am not disposed to regard this despondency as due altogether to their actual sufferings; on the contrary, I attribute it largely to the functional disorders of their digestive organs induced by the vascular disturbances there to which I have already adverted. Moreover, the very nature of the complaint, coupled with the fact that those affected are compelled to continue under the adverse influences by which it was contracted, are sufficient to account for much that is unsatisfactory in the results of treatment. When the bronchitis predominates, very satisfactory results often follow one's attendance, but in the lung disease proper drugging yields but very poor returns.

So far I have not spoken of the exciting cause of this chest mischief, and I will now deal with this matter. I find that the parts of the works which seem to be most injurious to those engaged in them are the calcining and the yellow metal departments. In the process of calcination or roasting, the rough copper ores which are in combination with different proportions of other metals, such as iron and sulphur, tin and arsenic, together with earthy matters, are heated in an appropriate furnace to such a pitch that the volatile ingredients are disengaged in the gaseous form, "whilst the metals that possess a strong affinity for oxygen become oxidised." Much dust also is flying about, and so a calcining furnace and its neighbourhood is a very rough corner of the works. The yellow metal workers suffer still more than the calciners, for the place in which they are working becomes at the moment of casting quite enveloped in fumes and particles of volatilised metal, which are necessarily drawn into the lungs when breathing. I may remark in passing that I have met with well-marked cases of "brassfounders' ague" amongst those yellow metal workers. But the injurious influences of the works are not limited to the calcining and the yellow metal departments; on the contrary, the whole range of furnaces at which the metal is smelted, and the mill in which it is rolled, all contribute to the general fund of irritation.

Now I come to the question of the duration of life in those affected with "copperman's chest." This is by no means short, although most of those who are sufferers by their occupations become prematurely old. It is no exception for men to live up to a good age, having been troubled with the various ailments I have spoken of for thirty years and onwards. The thing varies in degree, and although many men die at a comparatively early age from acute chest attacks grafted on chronic disease, a great many go on from year to year, suffering each winter from distressing coughs, shortness of breath, cardiac and gastric disturbances, &c., to such an extent that life is more a burden than a pleasure to them. I suppose the very conservatism of the pulmonary changes which form the product of the constant irritation to which they have been exposed serves them in good stead, and is a great bar to sudden and severe inflammations which would have the effect of terminating life. The keynote of the pathology of the subject is evidently irritation; and we all know what results when mechanical irritation affects the lungs and bronchial tubes: the former become affected with "a progressive fibrosis," whilst the latter take on dilatation and ulceration. The lung fibrosis becomes more and more confirmed; the "fibro-nucleated tissue [I now quote from Green] which constitutes it is developed from the walls of the alveoli, from those of the bronchi, and from the interlobular tissue; which new growth, as it increases, and from its tendency to contract, gradually replaces and obliterates the alveolar structure." Hence ensues permanent dyspnœa, aggravated at times and under various irritations into attacks of asthma. The very density of the lung, now occupied largely by fibrous tissue, is a bar to the presence of much blood in the parts, the capillaries being to a very great extent obliterated. Following this obliteration comes imperfect aeration of blood and all its concomitant troubles; whilst, on the theory of "collateral fluxion," the blood present in the body has to find some new channel of distribution other than its ordinary one, or submit to curtailment. We shall see that this last fact is well worth noticing, with a view to treatment directed against symptoms arising in consequence of it.

I have drawn special attention to the cardiac disturbance in these cases. It shows itself in the form of rapid and irregular action, and, in the later stages, by manifest incompetency to carry on the current of the circulation. On examining the pulse, it will be found to be irregular in force and rhythm—circumstances due, I take it, to disturbances of the vaso-motor nervous system. One can easily understand that the heart disturbance and incom-

potency are due to failure in coping with the extra difficulty it finds in propelling the retarded blood through the pulmonary capillaries, and that, just as in kidney cirrhosis, but in a different way, it is disturbed in its function. In kidney disease, hypertrophy of the heart often ensues; in these cases of interstitial pneumonia, due to copper smelting, the force of the heart's action is not augmented, but its frequency is, whilst the rhythm of its contractions is disturbed or abolished. May not the fact of the aeration of the blood being interfered with, and, through this disturbance of aeration, the general functional health of the body, have as much to do with enfeeblement of nervous control and heart contraction as the mere mechanical difficulty in propelling a blood current with an organ of ordinary capacity has? I cannot remember ever having met with a case of hypertrophy of the heart where there has been pronounced "copperman's chest"; on the contrary, in the majority of cases, I have found the condition of debility prevailing to which I have just drawn attention.

One can easily see, from the foregoing, that there is no royal road to *treatment* in the complicated state of "copperman's chest." To my mind, susceptibility plays a very important part here as in other diseases. I believe the majority of cases originate during the existence of a catarrh, and that the irritations have not much power of doing permanent mischief when the breathing apparatus is in a healthy condition. Acting on this theory, I do what I can to keep workmen affected with recent chest troubles at home, and on the funds of their clubs, as I regard an abstinence from work at such a time, in such an atmosphere as obtains in copper smelting, as a prophylactic measure of the first value. I cannot say that I have found any one drug to prove of especial value in treatment. I had hoped much from iodide of potassium, but have been disappointed. Belladonna, morphia, ipecacuanha, cod-liver oil, and digitalis are all serviceable in their turn, when indicated. The treatment, in fact, resolves itself after a while very much into one of combating symptoms; and the main point is to keep the patient as jealously guarded from adverse atmospheric influences as is possible. As with all people affected with organic visceral disease, chilling of the surfaces, whereby blood is diverted into the deeper-seated parts, is to be carefully guarded against; and it is a *sine qud non* in bad cases that the patient shall be kept in-doors during the prevalence of the cold or changeable seasons. The patients are most sensitive barometers, and, just as the column of mercury in a weather glass runs up and down with the varying atmospheric pressure, so they continually alter under the same influences. Box them up ever so much in comfortable quarters, they will still respond to the weather outside. The one special point in treatment is to act freely on the bowels occasionally. This gives marked relief, not only to the discomfort of flatulence from which they are prone to suffer, but to the very breathing itself. In bad cases where attacks of dyspnœa have prevented sleep, and when bromide and other soporifics have failed to give relief, a timely dose of jalapine or of white mixture has often proved a veritable sleep-inducer by tranquillising the system and allowing repose. It is well to bear this matter in mind, for the purgative often gives relief when not directly indicated.

Swansea.

CASE OF SLOUGHING OF THE SCROTUM, UNCONNECTED WITH URINARY EXTRAVASATION.

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IN connexion with the cases published by Mr. Morrant Baker under the above heading in THE LANCET of July 25th, 1885, and also of June 5th, 1886, the following notes may be of interest.

Private J. P——, aged forty-one, was admitted into hospital on the morning of June 4th, 1885. At the time of admission there was considerable swelling of the scrotum and perineum, with a dark thin streak of discolouration on the anterior surface of the scrotum. The appearance was very suggestive of extravasation of urine. The scrotum, however, was not tense, though much increased in size; the movements of the man's body as he was lifted into bed conveyed a tremulous motion to the œdematous scrotum. There was fulness in the perineum, which was rather more tense on the left than on the right side. Pulse 120; temperature raised. Tongue clean; cardiac sounds clear, and the physical signs of the lungs normal. The urine contained rather more than a trace of albumen. The patient is a strongly built, well-nourished man, but has been a rather hard drinker. He stated that he had a fall on the buttocks on June 2nd whilst going downstairs, and that on the following day the scrotum commenced to swell. He had since then, he stated, had a little difficulty in passing urine, but there was no history of stricture. A medium-sized catheter (Sir H. Thompson's) passed into the bladder without difficulty. This was withdrawn and No. 11 passed readily. It was thought advisable to tie in the catheter for a time. He was ordered to have some warm fomentations applied to the scrotum, and to take tincture of cinchona with dilute nitro-hydrochloric acid. In the evening it was evident that the scrotum would slough. Twelve or fourteen incisions were made in the scrotum, which was tenser than in the morning. The œdema was spreading to the penis, where an erysipelatous blush was present. A large amount of serum, perfectly free from any urinary odour, drained away. Temperature 104·5°; pulse 122. Poultices applied to scrotum.

June 5th: Temperature 103°; pulse 105. The penis is more involved. Several incisions made. Evening temperature 103·2°; pulse 114. Fresh incisions necessary.—6th: Temperature 103·6°; pulse 112, rather small. Tenderness felt on pressure above the groins, inflammation spreading to the subcutaneous tissue of the abdomen. Ordered one grain of opium, to be repeated in six hours, with strong beef-tea, eggs, and brandy. Evening temperature 103·4°; pulse 112. The patient showing a tendency to be very drowsy, the opium was not repeated. An incision has been made above the right groin, and incisions also into the subcutaneous tissue of the penis. Warm hip-baths with Condy's fluid ordered.—7th: Temperature 101·7°; pulse 106. Patient's aspect improved. Portions of the skin of the penis have sloughed. Evening temperature 102·9°; pulse 112. Charcoal poultices applied.—10th: Temperature 101°; pulse 100. Yeast poultices ordered. Evening temperature, which has been lower for the last two days, has risen to 103°; pulse 107.—11th: Temperature 101·6°; pulse 112. Patient's general condition improved. Nearly all the sloughs have come away, comprising the scrotum (with the exception of a fringe of tissue on each side, which much resembles in its shape and irregular border a cock's comb), the septum scroti, and the loose subcutaneous areolar tissues of the perineum. The two testicles, enclosed in their coverings of fascia, hang down completely denuded of cutaneous and dartos tunic. Evening temperature 102·9°; pulse 120.—12th: A little arterial hæmorrhage occurred from a vessel at the back of the wound, which was secured with a ligature. Temperature 101°; pulse 90. Evening temperature 101·4°; pulse 80.—13th: The surface of the wound is becoming clean, and looks healthy. Iodoform is now dusted over the surface. A liberal allowance of brandy and light nourishment ordered. Temperature 99·1°.—19th: Temperature still raised slightly at night. The discharge from the wound is decreasing. The incision above the right groin having closed, there is now some accumulation of pus. A drainage tube inserted; glycerine and carbolic acid applied as a dressing to the testicles.—24th: The fringes of skin are granulating from the bottom on the inner surface, and adhering to the testicles.—28th: The testicles appear much contracted, and are being gradually drawn up towards the groins. Granulations cover the cords and testicles.—July 1st: Deep-seated suppuration above the right groin, causing slight rise of temperature.—5th: Five skin-grafts were placed on the penis, which had lost a very considerable part of its cutaneous covering.—12th: Second grafting of four pieces of skin.—17th: Six of the grafts have taken. The wounds are healing fast.—27th: The patient is able to eat solid food, with a pint of ale. The wounds are dressed with sanitas. During the process of healing the testicles have gradually been retracted, and are now drawn up close to the external openings of the inguinal canals, and covered over by the thick adipose layer situated here. The fringes of skin left from the scrotum have been during the past ten days pressed over the wound by means of pads, and the

two granulating surfaces have united. A triangular surface is left covered with granulations between the edges of these fringes of skin.—30th: Two skin-grafts applied to the granulating surface. The testicles are now gradually coming down into the newly formed scrotum.—Sept. 14th: The wound is healed with the exception of a square half-inch.—30th: The patient was discharged from hospital, and shortly afterwards returned to duty.

At the present time (August, 1886) the man is in his usual health and performing his duties as a soldier. The urine is found on examination to be free from albumen.

Wellington Barracks, S.W.

PUERPERAL APOPLEXY IN A YOUNG WOMAN;

LIFE MAINTAINED FOR FOURTEEN HOURS BY ARTIFICIAL RESPIRATION.

BY N. WHITELAW BOURNS, M.D.

MRS. E——, aged thirty, engaged me to attend her in her first confinement, which she expected about the end of March. She was a rather thin, anæmic-looking woman, and a great sufferer from chronic rheumatic arthritis, causing distortion of the finger joints. She informed me that the articular trouble had been much better during her pregnancy; she otherwise enjoyed fairly good health. At 3.30 A.M. on February 18th I was called, and told by the husband, a medical man, that she appeared in her usual health up to midnight, when she retired to her bedroom, having entertained some friends during the evening. Her husband joined her about 1 o'clock, and found her complaining of pain in the epigastrium, for which she took a little bicarbonate of soda. The bowels had acted before going to bed, and urine had been passed freely. About 1.30 A.M. she complained of constant pain over the abdomen, and was given a grain of opium in a pill; but the pain continuing, a vaginal examination was made by her husband, and as he found the os externum dilated to the size of a shilling, he thought it well to send for the doctor and nurse. The patient was then begging for chloroform to relieve the continuous abdominal pain. I reached the room at 3.45 A.M., and found her quite unconscious, lying on her back, rather high in bed, with her left hand apparently supporting her head. On examination I found the os slightly dilated, and with some difficulty made out a vertex presentation. There was no vaginal discharge. Pulse about 90, and regular; respirations natural; pupils equal, not contracted, reacting to light. I carefully watched her for some little time, and saw that she continued in the same state, with occasional uterine expulsive pains, during which she held her breath, and moved her legs up and down in bed. As the urine voided before going to bed had been thrown away, I passed a catheter, and found the bladder empty; but upon withdrawing the instrument, a couple of drops of deeply blood-stained fluid escaped from its eye. Feeling alarmed at the condition of the patient, I sent for Dr. Clement Godson, and shortly afterwards found the pulse much slower—not more than 60 to the minute—and rather full; pupils equal, slightly dilated, and not reacting to light. No appearance of paralysis of the muscles of the face. The breathing for a few respirations was inclined to be stertorous, and at 6.15 A.M. she gave a couple of sighing inspirations, and then stopped breathing. No pulse at the wrist. The heart could be felt over the præcordial region, but the action was very feeble. I at once set up artificial respiration, and the heart soon began to improve, so that when Dr. Godson arrived, soon after 7 o'clock, he was able to count the pulse in the radial, and made it 96 to the minute. We discontinued the artificial respiration, but within two minutes the patient became markedly cyanosed and the pulse almost imperceptible. Artificial respiration was again started; hypodermic injections of ether and enema of brandy given, and the galvanic battery freely used. The fœtal heart was listened for, but could not be heard. Dr. Godson passed a catheter and drew off about three drachms of dark blood-coloured fluid; he found the os dilated to the size of a two-shilling piece. Enemata of peptonised beef-tea was given, and the respiration kept up by a staff of neighbouring medical men, who kindly lent their services. No change took place in the condition of the patient up to 2.30 P.M., when we had the advantage of a consultation with Drs. Playfair and Godson, and the diagnosis of cerebral hæmorrhage was maintained. However, artificial respiration was continued until past 8 o'clock, when reluctantly we had to admit that the case was hopeless, and on discontinuing our efforts life was soon extinct.

For the following post-mortem report I am indebted to Mr. Colby of St. Bartholomew's Hospital. Examination nineteen hours after death:—Rigor mortis well marked. Heart: Some excess of pericardial fluid, a patch of recent lymph as big as a shilling over the front of the ventricles near the apex. No valvular disease; no atheroma of the aorta. Lungs: Œdema of both lower lobes. Liver: Capsule stripped off easily in the neighbourhood of the right kidney. Kidneys: Some irregularity and thinning of the cortex. Surface smooth. Capsule of right came off very easily, and the organ was engorged. Ureters free. Bladder empty. Brain: Under the meninges and on the surface of the left hemisphere was a clot as large as a crown piece, covering the upper end of the fissure of Rolando; on the parietal region of the right hemisphere a similar but smaller clot. In the left hemisphere was a clot as big as a duck's egg, continuous with that on the surface, and lying outside the external capsule, but compressing both the basal ganglia and the convolutions. The right hæmorrhage was superficial.

There are, I think, several points of interest in connexion with the case. Had parturition actually set in before the hæmorrhage occurred? Again, were the uterine efforts in any way owing to the cerebral clot? I am inclined to think that, considering the aspect of the case before the loss of consciousness, and the condition of the os, the first step in the case was commencing parturition. Next as to the diagnosis; this was admitted by all to be a point of great difficulty, as the age and appearance of the patient, the onset of the attack, the absence of any paralysis, facial or ocular, and the fact of the catheter drawing off only a little sanguineous fluid, all point to other than cerebral causes. Lastly, the length of time life was maintained by artificial respiration is, I think, very interesting, if not unique, as there cannot be the least doubt that any interruption of artificial respiration between 6.15 A.M. and a few minutes past 8 P.M. must have resulted in immediate death. It would also be interesting to know how long life would have been maintained if sufficient relays of medical men could have been procured to continue artificial respiration. In conclusion, I may say that both Dr. Playfair and Dr. Clement Godson look upon the case as a most unusual one, and well worthy of being placed on record.

West Brompton.

A CASE OF

OVARIOTOMY, FOLLOWED BY SECONDARY INTRA-PERITONEAL HÆMORRHAGE; RE-OPENING OF THE ABDOMEN; RECOVERY.[1]

BY HENRY W. FREEMAN, F.R.C.S.I., L.R.C.P. LOND.,
SURGEON TO THE ROYAL UNITED HOSPITAL, BATH.

LIZZIE D——, aged twenty-two, a fine, tall, young, single woman, the eighth child of a family of nine, was admitted into the Royal United Hospital, Bath, on July 21st, 1886, with an abdominal tumour. She had menstruated painfully for five years, the menses having ceased four months before admission. She stated that a swelling on the right side of her abdomen had been noticed for fifteen or sixteen months, and it had gone on increasing solidly towards the left side, accompanied by some œdema of the legs. Her general appearance, however, was that of a healthy woman, and, but for the mechanical weight in carrying about the tumour, she had little to complain of, and had done her work as a domestic servant up to the day of her admission.

On examination, the abdomen was found to be occupied by a smooth, hard, semi-elastic growth, a little uneven at its upper margin, and extending from the *left* side of the pelvis to four inches above the umbilicus; dull all over on per-

[1] Read at the Bath and Bristol Branch of the British Medical Association, Dec. 9th, 1886.

cussion, with no definite fluctuation anywhere. The flanks were resonant, and the fingers could be carried between the tumour and the pubic rim. The abdominal circumference measured thirty-five inches and a half. Her excretory organs were healthy. The cervix uteri was pointed and pushed backward in the direction of Douglas's pouch; the uterus was fixed, the sound passing in to the extent of an inch and a half only. A rough, harsh friction sound was heard over the right lobe of the liver, and an extensive adhesion was diagnosed.

On Aug. 19th the patient was operated upon, under ether and antiseptically, and a large single solid cystoma was seen on opening the abdomen. An extensive adhesion was found over the right lobe of the liver, which was broken down and ligatured with chromic silk. The tumour was solid and unyielding, and before it could be raised from its bed free incisions were made and quantities of semi-solid gelatinous matter got away. Other small adhesions were treated in the usual way. The pedicle which involved the *left* ovary, *not* the right, was broad, thin, and so short that it was strained upon when the solid growth was moved in the abdomen. The pedicle was transfixed with the Staffordshire knot, clamped, and subsequently cut off with a bistoury. The peritoneal toilet was carried out by the aid of a Leiter's irrigator with warm water, and much sponging for cleaning out the abdomen was consequently avoided. An eight-inch Keith's glass drainage tube was inserted through the lower angle of the wound down into Douglas's pouch, and guarded antiseptically. Chromic acid sutures for the abdominal parietes were used as usual, and the patient was put to bed in an apparently satisfactory condition, with but little shock or collapse. Four hours afterwards, on visiting my patient, although the nurse reported favourably of her, a glance on removing the dark window-blind told me all was not right: the face was pale, pulse rapid, and the surface of the body was getting cold and clammy. On examining the tube and dressings no discharge was seen, but on carrying the rubber tube of a suction syringe through the glass tube straight into Douglas's pouch an ounce and a half of pure venous blood was brought up. Dr. Cave (the resident physician) quickly joining me, it took but a few seconds and a whiff of ether and chloroform to re-open the abdomen, when, to my dismay, we found the intestines were swimming in blood, and the whole abdomen filled with fluid and clot. Brandy was quickly injected into the rectum, the cavity rapidly cleared out, the pedicle seized and inspected, and the tied adhesions examined closely, but we could not make out the bleeding spot. When the stump of the pedicle was raised no venous oozing could be detected; when it was dropped back again into the abdomen oozing took place again and again into Douglas's pouch, but the blood came *not* from the stump. The pedicle was found securely ligatured; nothing came from it. On carrying a light into the pelvis, blood was seen to ooze from a small valvular rent in that portion of the left broad ligament between the stump and fundus of the uterus, but only when the pedicle was in a dependent condition and lying in the pelvis; it stopped at once as soon as it was raised and held up. Evidently a rent had been made in the pampiniform plexus of the left broad ligament, and it was at last picked up, transfixed in two places, and tied in halves. The abdomen was again minutely cleaned out with the irrigator, the wound closed, and the tube replaced; but the patient was pulseless and apparently moribund. A large wash-hand basinful of blood and clot had been cleared out of the abdomen. Iced champagne and peptonised milk with brandy, a teaspoonful every twenty minutes by the mouth, and nutrient enemata and suppositories by the rectum, were ordered, and in two hours, although blanched and restless, the pulse was felt beating feebly 168 to the minute, and she asked for sips of hot tea. Three hours after this vomiting set in, with thirst of course, but no headache or gaping. She dozed at short intervals during the night, and secreted four ounces of urine. Dr. Goodridge saw her with me at noon. Pulse 150; temperature normal. Strong doses of digitalis were advised. Retching, with constant vomiting, compelled us to abandon drugs by the mouth for a few hours; but on the morning of the second day, the pulse having gradually fallen during the night to 120, we gave her small doses of calomel and extract of opium by the mouth frequently, which brought away some bilious stools on the evening of the same day; she passed flatus freely, and expressed herself as feeling more comfortable. She took and retained her nourishment now. The rectum was washed out periodically to avoid tenesmus and septicæmic absorption. Her pulse fell on the fifth day to 108, the temperature not exceeding 100°; the glass drainage tube was emptied of about an ounce and a half of pure sweet serum, and on the sixth day it was withdrawn and the wound closed with stout silver wire. The parietal sutures were removed on the tenth day, except the silver one at the site of drainage, and she was then practically convalescent, with a pulse of 100, and temperature normal. Only one parietal suture suppurated, and that was due to the China twist not being prepared. She subsequently did well, sat up at the end of the month, and left the hospital five weeks after the operation. She menstruated six weeks after the operation and monthly since, without discomfort. The tumour weighed 10 lb.

Remarks.—It perplexed me very much at the time to explain how that small rent took place in the left broad ligament which caused all this hæmorrhage; and I believe when the solid weighty tumour was lifted out of its bed, the pedicle being thin, short, broad, and ribbon-like in structure, it was pulled upon and split before the ligature was applied. The clamp succeeded the ligature, it will be remembered, as previous clamping might have caused the rupture when the ligature knot was being tied. The ligature stump when dropped down bled, and when held up stopped, giving us the impression it was the cut pedicle that bled; but it was *not* so. A vein of the left ovarian or pampiniform plexus had been opened obliquely, and Rivington in the *Journal of Anatomy* has shown that these veins of the broad ligament communicate freely with the uterine plexuses and sometimes have imperfect valves; but on the *left* side it is commonly absent, the valve being found in the left renal vein, about a quarter of an inch from the entrance of the former vessel; and further, Bland Sutton, in demonstrating the remains of the meso-nephros or Wolffian body, in his splendid work on the Evolution of Pathology, points out, that this curious plexus of veins called the pampiniform plexus, are, in reality, the dilated tortuous venules, which originally administered to that very curious structure the paroöphoron. The bleeding was entirely venous, but the coagula were fragmentary, small, and thin, contrasting markedly with uterine clot in parturition. How far the interference with perfect coagulation is due to a closed serous cavity or to the lymph spaces of the peritoneum with their open stomata I am not prepared to say. We closely examined the right ovary that remained, and it was found shrivelled up, and atrophied like a piece of old wash leather; yet the patient has menstruated freely several times since the operation, which leads one to consider how far the Fallopian tube plays an active part in this phenomena.

Now, as to the character of this semi-solid tumour. Bland Sutton has so recently arranged his facts that it is difficult to dispute the origin of parenchymatous ovarian cysts from corpora lutea, and he describes them as arising in this way from infancy up to the end of sexual life, and ripe follicles are frequently present in the ovary before birth. In vol. xxxvi. of the Pathological Society's Transactions he describes the transverse section of a mare's ovary, showing a corpus luteum, the interior having broken down into two small cysts, and this explains the origin of many of those cysts so common in the ovaries of full-grown mares. It is a curious fact, and I have seen it often during the past ten years, that nearly all mares, after they attain the age of ten or twelve years, have cysts present in their ovaries, which probably arise from corpora lutea. You may demonstrate this statement more commonly even in cows than horses, and the primitive condition in the former animals of the ducts of Gaertner, the analogue of the vas deferens in the male, explains the frequent presence of cysts about the upper portion of the vagina. I have a strong impression the colloid tumour of this woman arose from a corpus luteum. Again, what becomes of the ligatured pedicle after the operation? It becomes encysted, we admit; lymph or clot forms on its surface; but how is it nourished, or does it slough? I shall risk the view that the everted peritoneum *above* the ligature bends downward, and joins the nearest point *below* the ligature, and so maintains its vitality. In Sir Spencer Wells's statistics we find that in his first 500 operations there were *no* deaths from hæmorrhage, but twenty from exhaustion, while in the second series of 105 there were only eight from exhaustion and two from hæmorrhage; but he adds the probability that some of the first series of deaths were also partly due to bleeding, but the fact was not established by examination. Keith's mortality from shock

and hæmorrhage was 3·6 per cent. Lawson Tait does not mention any deaths from hæmorrhage in his later statistics.

I wish to draw attention towards the use of the glass drainage tube in all abdominal sections, and I am aware that in the hands of Mr. Lawson Tait drainage is never used if the abdomen can be properly cleansed and dried. Keith still places great reliance on his Koeberlé's drainage tubes. Spencer Wells doubts their success, although I am under the impression he drained the peritoneal cavity in his earlier operations. Mr. Knowsley Thornton considers them only necessary in 2 per cent. of cases done antiseptically, and 10 to 15 per cent. of cases without antiseptics. Quite recently, however, Mr. Lawson Tait has pointed out how remarkable is the influence of the drainage tube in arresting hæmorrhage into the peritoneal cavity: for if the cavity is kept dry by frequent withdrawal of the blood, the bleeding, as from torn pelvic adhesions, will stop; but if drainage is not kept up the bleeding will probably prove fatal. This is a strong point in favour of the tube. In my own cases of laparotomy I have been struck with the little irritation produced by the glass tube in the abdomen. It has been kept it in for eighteen days in an hysterectomy and for a week in an ovariotomy; but care must be taken that the end drops easily into the bottom of Douglas's pouch, and is not displaced above the promontory of the sacrum. In the case recorded the glass drainage tube saved the patient, by immediately confirming the suspicion of secondary hæmorrhage, and minutes meant in her case her existence. In complicated cases with purulent cysts the utility of the thing is admitted; but for the beginner in abdominal surgery, we would venture to say, Use Keith's drainage tubes, and always do so if in doubt. It will be a safeguard to your patient and a comfort to you for the first hours after the operation, as it brings the doings of the peritoneal cavity within touch of your special senses.

Bath.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

CASE OF CHRONIC INTERSTITIAL NEPHRITIS.[1]

BY C. H. ROBINSON, F.R.C.S.I.,

MEMBER OF THE COURT OF EXAMINERS OF THE ROYAL COLLEGE OF SURGEONS IN IRELAND, LECTURER AT THE LEDWICH SCHOOL OF MEDICINE, ETC.

THE lady, aged fifty-five, whose case is described in the following brief notes, was under my observation for years, the signs of the malady from which she suffered commencing with hypertrophy of the heart, followed by albuminuric retinitis, epistaxis, and finally cerebral hæmorrhage, which terminated fatally last November. In the autumn of 1885 the sight of her eyes became considerably affected, and on examination by the ophthalmoscope hæmorrhagic retinitis of both eyes was found to be present. At this time the urine passed was copious in quantity, pale in colour, of specific gravity 1006, and on one occasion only was I able to detect any albumen, and then only the merest trace. At various intervals it was carefully examined, with a negative result. Under appropriate treatment (which included the administration of the perchloride of mercury in combination with the iodide of potassium, the bowels being kept open by occasional doses of Friedrichshall water and a spare dietary enforced), the sight after several weeks was restored, and the specific gravity of the urine gradually became normal. In January, 1886, I was sent for in consequence of a severe attack of epistaxis, which was arrested by plugging the anterior nares and applying an ice-bag over the cardiac region. In October of the same year I attended her for uræmic vomiting, and in the following month she called at my house about three o'clock, and when leaving complained of a numbness in the right leg. She wished to proceed into town, where she had some business to transact; but I persuaded her to go into the waiting-room, and in a couple of minutes there was complete anæsthesia as high as the knee. She remarked that she had dreaded this, and expected to be paralysed. I had to leave her for a few minutes, and then found the right arm paralysed as well as the leg, also the face on the same side. Her articulation now became impaired, but she could put out her tongue, which was directed to the right side. I had her removed to her own house, where, on arrival, although unable to speak, she appeared to be in a semi-conscious state. About seven o'clock the same evening she was perfectly unconscious; the pupils contracted; pulse 78; temperature 95°; respiration fairly quiet, occasionally stertorous. During the night she exhibited Cheyne-Stokes' respiration; the pulse gradually got higher; the temperature went up to 100°, then to 102°; while the face and neck were greatly congested. The eyes, which were now dilated, had that peculiar fixed stare so characteristic in serious attacks of cerebral hæmorrhage. The right arm was very rigid, but gradually relaxed. Death took place about thirteen hours after the first seizure, being preceded by a violent trembling.

Some, perhaps, might regard the fatal result in this case as due to uræmia, in which occasionally hemiplegia has been shown to occur;[2] but the absence of convulsions and the rapid increase in the temperature would, I believe, show such an opinion to be erroneous. Albuminuria may exist, it is well known, without nephritis, but the converse of this is comparatively rare. Where no trace of albumen can be detected in the urine, but the general symptoms point to interstitial nephritis being present, the test recommended by Feltz and Ritter, as modified by Prof. Bouchard, it is said will decide the matter.[3] The urine of a healthy person when introduced into the circulation of the rabbit by injection into the veins of the ear kills the animal in the proportion of 50 grammes per kilogramme of weight. But that of albuminuric subjects can be tolerated in much larger doses, and in one case mentioned by M. Dieulafoy a rabbit of two kilogrammes, for which a toxic dose of healthy urine would be 100 grammes, exhibited no discomfort until 260 had been injected, and even then recovered.

Dublin.

[1] Read before the Medical Section of the Academy of Medicine in Ireland.

[2] Revue de Médecine, Nov. 1885. THE LANCET, 1887, p. 760.

NOTES ON A CASE OF HÆMOPERICARDIUM FROM RUPTURED CORONARY ARTERY.

BY J. W. BATTERHAM, M.B. LOND., F.R.C.S.

ON March 9th, 1887, I was called to a lady who had died suddenly. The following was the only history obtainable from the friends of the deceased. She was seventy-five years old, and had suffered for "some time" from "slight fits," in which she "struggled" and lost consciousness for a few minutes. These fits were usually preceded by sickness. About noon on the day of her death she complained of pain in the left mammary region, and took a Gregory's powder. She then had lunch, which consisted only of a little beef-tea. Her servant coming into the room about an hour after lunch found her sitting in a chair dead. The deceased's face was pallid. She appeared to have vomited just before death, as some brownish fluid containing gritty particles (apparently the beef-tea and Gregory's powder) was seen staining her chin and the front of her dress.

The necropsy, performed twenty-four hours after death, showed the heart enveloped in about four or five ounces of dark clot. There was no rupture of the heart or great vessels. On the posterior surface of the heart was a slight subpericardial ecchymosis, covering an area about the size of half-a-crown, situated on the interventricular groove about an inch from the apex of the heart. A fine aperture with ragged edges was discovered in the pericardium covering the centre of this ecchymosis. On vertical section through this aperture, a few small clots were seen in the muscular substance of the hypertrophied left ventricle. The largest was about the size of a small pea, and was situated immediately beneath the minute aperture in the pericardium above described. The coronary arteries were tortuous and thickened, their coats containing numerous calcareous plates. On dissecting out these vessels, the left, after running down the anterior interventricular groove and turning round the apex to the back of the heart, was found to terminate in two main offsets, which surrounded the area of hæmorrhage. Two small twigs were traced into the clots,

but were of too small size for any rupture of their walls to be detected. These, I imagine, were the chief source of the hæmorrhage. The heart weighed 12¾ oz. Its muscular tissue was firm, and of good colour. The thickness of the right ventricular wall was one-eighth of an inch, that of the left (at its thickest part) half an inch. The valves were normal in appearance; the aorta was healthy. The other thoracic and the abdominal viscera were normal, with the exception of the kidneys, which were small, red, and granular, and showed a marked diminution in the cortical substance. The head was not opened.

From the post-mortem appearances, it may, I think, be concluded that the "fits" from which the deceased had suffered were probably of uræmic origin. The pain in the chest felt for a few hours before death may have been due to the rupture of fine branches of the left coronary artery into the myocardium, while the perforation of the pericardium and subsequent hæmorrhage into the pericardial sac, resulting in fatal syncope, may have been induced by an act of retching.

Hæmopericardium is not a very uncommon condition. References to between eighty and ninety cases may be found in the first thirty-five volumes of the Pathological Society's Transactions. The most frequent causes are rupture of the heart or aorta, occasionally from violence, but more commonly the result of disease. Seven cases due to rupture of an aneurysm of a coronary artery are referred to in vol. xxii. of the Transactions. Scurvy has also given rise to hæmorrhage into the pericardial cavity. On reference to Neale's Digest, I find that a case of hæmopericardium arising from a ruptured coronary artery is narrated in the *Medical Times and Gazette* for 1862 (vol. i., p. 317). In this instance the patient, a woman aged sixty, lived six days after the appearance of the symptoms, of which præcordial pain, dyspnœa, a small, frequent, but regular pulse, and coldness of the extremities appear to have been the chief. A case of purulent pericarditis in which a rupture of a coronary artery was found is quoted in Ranking's Abstract for 1861 (vol. ii., p. 85).

St. Leonards.

OTITIS MEDIA HÆMORRHAGICA.

By K. B. BULLEL, M.D.

CASES of pure and simple otitis media hæmorrhagica I think, are rare. Dr. Roosa mentions two cases, and Burnett only makes a passing allusion to the disease in his work on Diseases of the Ear. This is in itself a sufficient inducement to me to place the following case before the profession.

Mrs. C——, aged forty-two, mother of nine children, and in a fair state of health, was placed under my treatment for an acute attack of pain in the left ear. Previous history: She had been suffering from the pain in the ear for the past ten days. The pain at first was of an intermittent nature and confined to the ear only. For the last two days it had been very severe, constant, and radiating all over the left side of the head and face. She complained of a feeling of fulness and acuteness of hearing on the affected side. The act of mastication and deglutition aggravated the suffering. The parts were very sensitive to touch. There was occasional paroxysmal aggravation of the severity of the pain. Along with these symptoms there were pyrexia, restlessness, and insomnia. On examination I found the left tympanic membrane uniformly congested and slightly bulged at the anterior and inferior quadrant. The right membrane was slightly in-drawn, and the naso-pharynx congested. The severity of the pain and a bulged appearance of the membrane induced me to suggest the operation of paracentesis, with a hope that that would relieve the suffering of the patient. The operation was performed at once. To my surprise, there was a gush of blood through the puncture in the membrane and the side of the nose, and nearly two drachms flowed freely. The intensity of the pain and sense of fulness were immediately relieved. From this time until complete recovery of the patient, which took nearly a week, not a drop of blood or muco-purulent matter escaped through the puncture in the membrane; the latter healed up in five days. Subsequent examination of the urine showed no trace of albumen in it. It is nearly four weeks now, and on examination of the ears I find no trace left as to where the membrane was punctured. In my opinion this case can be called a pure and genuine "otitis media hæmorrhagica."

Bombay.

CASE OF PLACENTA PRÆVIA.

By B. WALKER, L.R.C.P. ED.

ELIZABETH B——, aged thirty-three, has had seven children, of whom two only survive, the rest having died in infancy, at ages varying from two weeks to three years and a half. Two of these were born at the eighth month. There was no history of syphilis, and no hæmorrhage had occurred at previous labours. She had reached the seventh month of pregnancy, which had advanced normally. She went to bed as usual, and on awaking at 1 A.M. on April 15th found the bed very wet. A neighbour was called in, and I was with her in half an hour after her awaking. I found her in a pool of blood on the bed; she must have lost about a gallon, for it had sunk through the mattress and deluged the floor, and her nightdress was saturated up to the armpits. On examination, the vagina was found to be filled with clots, and blood was flowing freely. The os was about the size of half a crown, and complete placenta prævia was present. Introducing the hand into the vagina and detaching the placenta, a vertical presentation was found, and with two fingers in the uterus and the right hand on the abdomen, combined version after Braxton Hicks's method was quickly and easily performed, and a foot brought down, thus plugging the cervix and causing the hæmorrhage to cease, the whole being done in five minutes. The woman was left comfortable on the bed, a dose of ergot and strychnine having been given, for there had been no expulsive pains hitherto. At 9 A.M., as far as labour was concerned, things were *in statu quo*. On calling at 1 P.M. I found the woman delivered (child stillborn) and the placenta expelled without any hæmorrhage. The woman made an uninterrupted recovery.

This case is very like the one recorded by Mr. Taylor in THE LANCET of April 30th (p. 875). The only object in adding this is to call attention to the long time (nearly twelve hours) before delivery was effected after version. After bringing down a foot, and the hæmorrhage having ceased, it seemed much safer to leave nature to finish the delivery than by traction on the child to empty a uterus which had shown no signs of physiological action—to empty it, and possibly to reawaken the hæmorrhage. In some cases the life of the child, though only at the seventh month, may be a consideration, but in this instance the mother's safety was of paramount importance, and would be in most cases, and entitled to the first place. The patient had, besides, an interesting history. In October, 1882, she had the lower half of the left scapula removed for a sarcomatous growth (her mother died at the age of thirty-seven from "internal tumours"), leaving her an arm little impaired for use. (See THE LANCET, vol. i., 1885, p. 203.) About three years ago, on becoming pregnant, a large ulcer—or rather two—and fungating growths, larger than an orange, attacked the outer side of the right calf. They healed quickly when she was put to bed. When pregnant again, seven months ago, another deep ulcer formed outside and behind the external malleolus. This lasted through the pregnancy, but is now reduced to one-half its size, and healing rapidly; besides this, an ugly sore formed over the sternal end of the right clavicle, which healed after a time. On each occasion it was feared the sarcomatous growth was reappearing, but the termination of pregnancy has hitherto been followed by the quick disappearance of the sores. The growth removed consisted of round cells with one large or two smaller nuclei, and of unipolar nucleated cells.

Spondon.

NOTE OF A CASE OF SUDDEN DEATH FROM PULMONARY APOPLEXY.

By W. HENRY KESTEVEN, M.R.C.S., L.S.A.

R. F——, aged sixty-five, was found lying on his left side on a staircase, with his head crushed against the wall and bent upon his right shoulder. At an examination of the body, made seventy-five hours after death, the brain was found to be healthy, though somewhat congested. The heart was healthy, and contained a small quantity of fluid blood in the left ventricle; none in the right. The lungs were adherent to the walls of the chest, and extensively infiltrated with tubercular deposits. The trachea and both bronchi contained blood. The source of this blood was

found to be in the left lung, the whole of the interstitial tissue of which was charged with extravasated blood. No distinct cavity or large clot was found in the lung, nor was it possible to find the vessel which had given way, though several branches of the pulmonary artery were traced. The bronchial tubes and tubules were full of blood. No blood had escaped from the trachea into the mouth or into the pharynx.

The case seems to be one of those described by Niemeyer as causing death suddenly, before hæmoptysis can occur, by blocking up the bronchi with blood and so suffocating the patient. It is recognised by the author just named as a very rare form of disease.

Holloway-road.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

VICTORIA HOSPITAL FOR CHILDREN.

TWO SUCCESSFUL CASES OF OPERATION FOR CLEFT PALATE IN CHILDREN OF TWELVE MONTHS OF AGE; REMARKS.

(Under the care of Mr. H. H. CLUTTON.)

THE age at which operations for the cure of cleft palate should be undertaken has caused considerable discussion in the past, and there is still much diversity of opinion about it. The operation has been performed on a child of only four days old, but unsuccessfully, and it is not often attempted on children of twelve months old, and could only be successful in such cases as are here recorded. We agree with Mr. T. Smith's remarks:[1] "None but very general rules can be laid down as to the best time for operating, since each case must be judged on its own merits, and every surgeon will be guided by the results of his own experience." We would refer our readers to Mr. Clutton's remarks on the cases.

The first case (for the notes of which we are indebted to Dr. Moline, the medical registrar) was a girl of twelve months old, who was admitted in August, 1886. She was a healthy-looking, well-nourished baby, brought up by hand, as she could not take the breast. The cleft involved only the soft palate, and there was no other abnormality. On Sept. 2nd, the infant being under chloroform, the edges were pared and brought together with fine silk sutures. A lateral incision, chiefly through the pillars of the fauces, was made on each side to relieve tension. On Sept. 8th a few of the sutures were removed under chloroform. On the 15th the remaining sutures were removed in a similar manner. The palate was entirely healed and closed, with the exception of a small aperture near the hard palate. She left the hospital a few days afterwards. When seen again a few months later this opening had closed, and the line of union was scarcely perceptible, the uvula even having its natural form. The mother also said that the baby's cry had a much more natural sound than it had before the operation.

The second case, for the notes of which we are indebted to Dr. Wills, the house-surgeon, was a boy of eleven months of age, who was admitted on Jan. 17th, 1887. This was not such a healthy-looking child as the last, and was therefore kept in hospital on careful diet for a month before attempting any operation. With care the infant could take the bottle, but the food easily returned through the nose. The child had no other deformity, nor was there any history of this or any other abnormality in the family. The cleft involved the soft palate and a very small portion of the hard. The two halves seemed fairly thick, and not too far apart. On Feb. 10th, the child being under the influence of chloroform, Mr. Clutton pared the edges, and, finding that part of the cleft which involved the posterior edge of the hard palate too fixed to be successfully brought together by the simple operation, made a lateral incision on each side close to the gum, and raised a muco-periosteal flap from the bone, by the method generally known as Langenbeck's. The whole cleft was then very easily united by fine silk sutures. The pillars of the fauces were partially divided with a pair of curved scissors, as in the previous case, to relieve tension, and the operation was concluded on Feb. 20th. The sutures were all removed under chloroform, when the palate was found perfectly united from one end to the other.

Remarks.—It is obviously a great advantage, if the voice is to obtain its natural sound, that the operation should be done at as early an age as possible. If, however, it fails, any subsequent operation is made more difficult. It is, therefore, of great importance that only the simplest cases should be undertaken at this early age; and even amongst these success will greatly depend upon the thickness of the divided palate which is to be united. A healthy child at twelve months of age may have the simplest cleft in its palate, involving only the velum, and yet the tissues on each side may be so thin as to give a very poor prospect of success after operation. The circumstances which induced Mr. Clutton to operate at so young an age in these two cases were—the simple character of the cleft, the abundance of the tissue on each side, which would afford a thick bond of union, and the healthy condition of the children. The nursing after the operation which the child is likely to obtain has also to be considered, for with constant crying success is impossible. These two children were scarcely out of arms during the ten days succeeding the operation, and the success that was thus obtained speaks volumes for the care and trouble which was devoted to them by the nurses at the Victoria Hospital.

[1] Heath's Dictionary of Surgery: art. Cleft Palate.

LEEDS INFIRMARY.

RUPTURE OF BLADDER; OPERATION; DEATH FROM PERINEAL HÆMORRHAGE; REMARKS.

(Under the care of Mr. T. PRIDGIN TEALE.)

FREDERICK S——, aged twenty-five, was admitted on Dec. 6th, 1883, having been violently assaulted two hours previously. He had been kicked in the abdomen and perineum during a quarrel, and when admitted complained of pain in the lower part of the abdomen and of inability to pass urine. There was tenderness of the abdominal wall, with tension of muscles, but no visible bruising at either seat of injury, and the patient was under the influence of alcohol. The retention was relieved by a No. 10 catheter, a few drops of blood preceding the flow of urine. The catheterism was repeated twice at intervals of six hours. There was, moreover, such an absence of collapse or alteration of look, pulse, or temperature, that the nature of the case was not suspected by the resident staff. On the following morning he was seen by Mr. Teale, who, observing a tympanitic abdomen, with dulness of the flanks, and being told that the more recent catheterism had only drawn off an ounce or so of urine, suspected rupture of the bladder.

At midday, after consultation with his colleagues, who agreed in the diagnosis of ruptured bladder, Mr. Teale operated. Having first opened the perineum in the median line and introduced into the bladder an indiarubber drainage tube, cut short at the wound, and stitched to its edges, Mr. Teale opened the abdomen between the umbilicus and pubes. A large quantity of pale straw-coloured fluid was found, in which the intestines floated freely, and without any trace of inflammation or congestion. At first the rent could not be seen or felt, owing to the collapsed state of the bladder, but on injecting through the perineal drainage tube a weak solution of carbolic acid a vertical rent was detected in the posterior surface of the bladder, not far from the apex, and fully an inch in length. The rent was closed by six fine catgut sutures, so inserted as to bring the peritoneal surfaces into contact without perforating the mucous surface, and the abdominal wound was closed without the insertion of any drainage tube. There was more oozing of blood from the peritoneal wound than usual, and shortly after Mr. Teale left the hospital Mr. Robson was called to the patient, who explored and then plugged the perineal wound. Some hours after there appeared to be some fresh oozing of blood, and the man became alarmingly anæmic from loss of blood, and died the next morning at seven o'clock.

At the post-mortem examination, the rent in the bladder

was found to be perfectly water-tight, and there was no peritonitis.

Remarks by Mr. TEALE.—The hæmorrhage from a simple median perineal wound was so unusual that one can only look upon it as an unfortunate coincidence, possibly the result of the kick in the perineum, of which no visible bruising gave warning. In another case of ruptured bladder, I should not think it necessary to insert the perineal tube, partly because the recent experience of others shows that such a course is not needed, and partly because it is a question whether on the whole suprapubic drainage would not be more satisfactory.

SAMARITAN HOSPITAL FOR WOMEN, NOTTINGHAM.

CASES OF ABDOMINAL SECTION; REMARKS.

(Under the care of Dr. TRUMAN.)

CASE 1. *Parovarian cyst.*—Jane S——, aged twenty-four, was admitted on May 19th, 1886. The menstrual periods commenced at the age of fifteen, and were painless until the last four or five years. The nature of her work requires frequent exercise of her strength in lifting heavy weights. Owing to pain in the lower part of her body she has been unable to go to work for the last six weeks.

On examination per vaginam, there was found a rounded swelling in the right lateral fornix, the size of a cocoanut, perfectly resistant and unyielding to pressure. Uterus pressed against the os pubis; its cavity not lengthened. The swelling felt solid, and it was suggested that it was due to a pedunculated myoma. In reference to this, Dr. Walter mentions the close resemblance of the physical signs, in a case of parovarian cyst, to those caused by a myoma attached to the posterior wall of the uterus. In the present case, however, the normal length of the uterine cavity, the absence of metrorrhagia, &c., pointed rather to the existence of a small ovarian cystoma.

An operation was performed on June 15th. In the right half of the pelvic cavity, and not at all rising above the brim of the pelvis, was a unilocular cyst, perfectly unadherent, and with a long narrow pedicle crossing over to the left side of the uterus. By aspiration were removed twenty fluid ounces of a perfectly clear and white liquid, of specific gravity 1006, containing neither fibrin nor albumen, but abounding in chlorides. The cyst was then drawn out, and the pedicle, three-quarters of an inch in diameter, secured by the Staffordshire knot and divided, when it was seen to spring from the *left* broad ligament, the cyst having fallen over into the *right* half of the pelvic cavity. The ovaries were healthy, and were not removed.

The patient made a good recovery, and was discharged on July 10th. She is in full work, and menstruation has been painless since.

CASE 2. *Dysmenorrhœa.*—Mary H——, aged thirty-two, was admitted on July 21st, 1886. The menstrual period began at fourteen. She has had severe dysmenorrhœa for eight or nine years, and was latterly dismissed from one of the metropolitan hospitals as incurable. The periods are regular, lasting seven days, with great loss, small clots being frequently observed. The pain never ceases in the intervals, but is intensified at the periods. The patient has great difficulty in walking a hundred yards, and this always increases the pain. She has been unable to work at all for the past two years, and is thus, much against her will, dependent on her friends for support. The situation of the pain is the left ovarian region, and this pain is increased if she lies on the left side.

On examination, the uterus was found slightly retroflexed. In the situation of the left broad ligament was a swelling the size of a walnut, freely movable, and exquisitely tender, nausea being caused when it was pressed between the two index fingers, one internal and one external. There was no tenderness. In the right ovarian region there was no pain except in the above-named spot.

On July 24th an operation was performed. The appendages were removed on both sides; the left ovary was enlarged and becoming cystic.

The patient was discharged cured on Aug. 24th. After a time spent in recovering her strength, she returned to work. She can now walk a couple of miles, and can work, if necessary, for fourteen hours a day. Although both ovaries were completely removed, there is a discharge of blood every month; this is unaccompanied by pain.

CASE 3. *Hæmatosalpinx (?).*—Mrs. H——, aged thirty-two, was admitted on Dec. 7th, 1886. Has had four children; no miscarriages. First labour ten years ago; forceps were applied for five hours and a half. She was in bed for two months afterwards. Ever since has had more or less pain in the right iliac region. Has also had four attacks previously to the present one; these attacks came on suddenly and kept her in bed for three or four months. Her last child, fourteen months old, is at the breast. For the last eight months Mrs. H—— has menstruated regularly, and the periods have been longer than usual. A month ago she had sudden pain in right hip and pubic region, with vomiting and faintness; has been in bed since. Has had great difficulty in emptying the bladder.

On examination, the cervix was found jammed close to the pubic bone; the cervix was that of an unimpregnated uterus, but with a deep laceration. The right half of the pelvis was occupied by a tense, fluctuating tumour, continuous with a swelling above the pubes. This tumour stretched over to the left side, but the left half of the pelvis was not so closely filled up as the right. There was great tenderness to touch externally and internally. Temperature 100·2°. An operation was urgently needed on account of the partial blocking up of the urethra. This, however, had to be deferred; the woman was suckling, and the sudden weaning of the child made her very feverish. Pain was considerable, and had to be combated by opium. On re-examination on Dec. 29th, it was seen that the abdominal swelling was larger, and that, in addition to steady increase since the 7th, it had rapidly increased during the past forty-eight hours, and the woman was losing colour. There was marked dulness in the hypogastric region, and that mostly on the left side. The swelling felt per vaginam when first seen was principally on the *right* side; it was now on the *left;* and to the extreme left of this elastic swelling was felt a more resistant body.

The diagnosis was not very clear, but seemed to be one of three things: an ovarian cyst, with twisted pedicle, and consequent hæmorrhage into its cavity; an extra-uterine fœtation; or a hæmatosalpinx, the latter accounting the more readily for the history of four preceding attacks, if small hæmorrhages be supposed to have taken place. It was evident that hæmorrhage was actively going on at the present time, and the operation was performed on Dec. 30th. The pelvic cavity exhibited the following condition of things. The left half was occupied by a large swelling, consisting mainly of blood clot. The uterus was enlarged about three-quarters of an inch in all three dimensions. Between it and the rectum was the tumour, semi-fluctuant, and from three to four inches in diameter; by its upper surface it was free, but by the other surfaces it was adherent. The wall of the tumour was formed of (1) a strong, thick, fibrous investment, so firmly adherent to the bowel that it had ultimately to be separated by the knife, and passing upwards to the left cornu of the uterus, where it showed a large, ragged rent, and (2) of a layer of plastic lymph, which limited the contents of the tumour. This layer broke down with a touch and blood clot escaped. The finger was passed round the tumour and adhesions were pretty easily broken down. The solid part of the tumour sprang from the left cornu, and apparently was the left ovary; it was ragged and torn, and contained a cavity two inches across. The rest of the tumour consisted of blood clots and dark fluid blood. The blood clots were of two kinds, fresh and red, and old and decolourised (fresh blood coinciding with fresh pain and swelling on the 28th and 29th). In these clots were found a membranous cyst, very thin, and about three-quarters of an inch in diameter, and two small bean-shaped bodies half an inch to three-eighths of an inch long. The clots were cleared away, and the part of the growth springing from the uterus tied and removed. That part of the fibrous investment that was adherent to the bowel was tied and divided, leaving a margin half an inch deep attached. The posterior surface of the uterus was left freed, but covered with a rough layer of lymph. A glass drainage tube was inserted to the bottom of the posterior cul-de-sac.

The case went on well. The drainage tube was removed on Jan. 3rd, and the patient discharged on Feb. 1st.

Remarks by Dr. TRUMAN.—A question arose whether this might not have been a case of early tubal pregnancy. Dr. Handford, physician to the Nottingham General Hospital, most kindly examined the relics for me. He says: "All the tissues, besides the clot, are so infiltrated and sodden with blood

that it is unusually difficult to recognise the parts. I have made some sections, but the nature of the material is very unfavourable for making good sections. In the first place, I have failed to find anything fœtal, unless the small sac, which you suggest formed the envelope of the embryo, is of that nature. I would suggest that a sac that size could not be part of an ovum more than from four to six weeks old, and that the outer surface should be most distinctly shaggy and villous from the villi of the chorion. I do not think that at that early period the amnion would separate from the chorion so as to form a smooth surface. But if it is not a fœtal envelope, I cannot say at all what it is. The two bean-shaped bodies are undoubtedly not fœtal. They consist, in greater part, of blood clot; there is no trace of the cellular structure which makes up the whole of the early embryo, and there is a small quantity of adult adipose tissue which finds no place in the embryo till much later. The large mass with the peritoneal covering, and large cyst with an irregular mass projecting into it, I take to be explicable as follows:—The irregular mass projecting into the cyst seems to be an ovary much torn up and damaged by interstitial hæmorrhage. I cannot find any Graafian follicles, so that I cannot be sure; but at any rate, I can say that the tissue is adult, and not fœtal. There is much fibrous tissue, both white and elastic, and a considerable number of non-striped muscular fibres, with many large bloodvessels. I think I can trace going to it the round ligament, and the Fallopian tube, the extremity of which has, I conclude, taken part in forming the cyts into which the ovary projects. I would suggest as not unlikely a tubo-ovarian pregnancy, rupturing at about four to six weeks. At this time the ovum would be very small, and the embryo, being entirely cellular, would easily become disintegrated."

CASE 4. *Ovaritis.*—Mrs. T——, aged thirty-one, was admitted on Jan. 7th, 1887. Has always been regular, and the periods were painless up to her marriage, three years previously. Has never been pregnant. Three weeks after marriage had severe dysuria and white discharge; this lasted three weeks. Ever since then has had, a week before the period, swelling of the breasts, with secretion of clear liquid. This goes off when the menses appear. Periods since marriage have come on every three instead of four weeks, but the duration has gradually decreased. Has had ovarian pain also, and this has much increased in the last twelve months. Has never done a day's work without pain since three weeks after marriage. Pain in lower part of the abdomen was at first relieved by lying on the abdomen, or by elevating the knees; but this is not the case now. For the last twelve months she has been unable to do her household work; any slight jar, such as walking, brings on the pain. Sexual intercourse is most painful, and she is unfitted for all her duties. There is an adenoma of the left breast, and in both breasts there is an abundance of clear serous fluid, in which colostrum corpuscles may be seen under the microscope.

On examination, in the left lateral fornix was a solid, movable tumour, the size of a chestnut, very sensitive; in the right half was a thickened and sensitive spot, but no movable tumour. In Douglas's pouch was an enlarged Fallopian tube.

An operation was performed on Jan. 20th—ovaries and tubes removed on both sides. On left side, the ovary was loosely adherent to the part surrounding it; on right side, the ovary was much freer. The left ovary contained a false corpus luteum. The right ovary was healthy, but the Fallopian tube was blocked up and distended. The free surface of the appendages was everywhere covered by flakes of organised lymph. There was a good deal of bleeding, and a drainage tube was used, which was removed on the 25th. The case was discharged cured on Feb. 12th. This was evidently a case of chronic ovaritis following gonorrhœa.

Remarks.—The operations were done with strict antiseptic precautions, but without the spray. In the second case the temperature rose on the first and second days to 100·6°, and on the ninth to 102°. With these exceptions, the temperature never rose above 100° in any of the four cases.

ON the 31st ult. a Local Government Board inquiry was held at Highgate respecting an application by the Hornsey Local Board to borrow £7663 for works of sewerage and public improvement. There was some opposition to the scheme, but ultimately the inspector intimated that he should report favourably upon the application.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Acute Cardiac Dilatation from Alcoholism.—Endemic Hæmaturia.—Lupus treated partly by Scraping and partly by Salicylic Paste.—Hammer Toe.

THE last meeting of the session was held on the 27th ult., Dr. W. H. Broadbent, President, in the chair. The report of the committee on Charcot's Joint Disease and of that on Myxœdema have been completed, and will be published in the ensuing session.

Dr. ROBERT MAGUIRE read a paper on Acute Dilatation of the Heart produced by Alcoholism. Alcoholism produces acute changes in the nervous and circulatory systems. The latter are not usually of serious moment, but may occasionally be important, as shown by the two cases here given. The first patient (aged twenty-three), when applying for treatment, showed œdema of the legs and some ascites. The pulse was small, weak, and of low tension, beating at the rate of 140 per minute. The heart beat was diffused, apex outside nipple not lowered, and epigastric pulsation excessive. Cardiac dulness was extended vertically and laterally. The cardiac sounds were short, weak, and spaced, and a slight systolic murmur was heard. There was dyspnœa, but no abnormal pulmonary sounds. The urine was excessive in quantity, and of low specific gravity. There was no history of rheumatism or of previous cardiac symptoms, and, after excluding all other causes, it seemed clear that the dilatation of the heart was produced by alcoholism, of which the patient gave a pronounced history. Under treatment by cardiac tonics the symptoms and the enlargement of the heart entirely disappeared. The second patient, aged forty-three, when first seen, had œdema of the legs, tremor of the tongue and hands, and complained of nervousness and want of sleep. The pulse was small, feeble, and easily compressible. The after-beat of the heart was outside the nipple line, and was somewhat diffused. The transverse dulness of the heart was increased in extent. The cardiac sounds were short and sharp, but no murmurs were to be heard. As in the previous case, no cause could be found for the dilatation of the heart, other than acute alcoholism, of which the history was clear. Under treatment the symptoms entirely disappeared. The mechanism by which alcoholism produces the dilatation is probably not by increasing the peripheric resistance, but by poisoning the heart muscle itself, so causing it to give way before a normal, or even a reduced, arterial tension.—Dr. BROADBENT said the subject of the paper was novel to him, but it was not easy to understand how the dilatation was produced, unless it were aided by the imbibition of large quantities of alcohol without food, thus increasing peripheral resistance.—Dr. ORMEROD asked what form of alcohol had been taken, for Leyden had noted similar conditions to follow beer-drinking.—Dr. STEPHEN MACKENZIE said that he agreed with the view taken by Dr. Maguire, though pyrexia should be borne in mind as a cause of myocardial dilatation; also actual myocarditis may occur under various circumstances.—Dr. EWART said that beer-drinking, though very common, could hardly be the explanation, unless combined with other causes. He had not observed dilatation to commence in the left ventricle, nor considered that it was due to toxic effects. With dilatation of the heart or of any of the cavities he would expect to find an increased (and enfeebled) rate of the heart's action, and this might not correspond to the pulse rate.—Dr. HINGSTON FOX remarked that a single testing for albuminuria would be insufficient to exclude it.—Dr. MAGUIRE, in reply, said gin was the alcohol consumed. The urine had been carefully examined. Also, he had been careful to eliminate any possibility of peripheric resistance being operative in the causation of the dilatation, and even after recovery arterial tension was not in excess.

Dr. HANDFORD communicated a case of Endemic Hæmaturia that he had had under observation for a year and three-quarters. The patient was a fresh-complexioned, healthy-looking man, aged twenty-four. He had gone to Natal at the age of twenty-one, and had remained there for three years and a half. He first passed blood in the urine on the voyage home. While in Natal he enjoyed good health, except for two attacks of dengue. When first seen in

November, 1885, he complained of pains in the loins, occasional discomfort in micturition, and the passage of blood in the urine. Numerous ova and embryos of the distomum (bilharzia) hæmatobium were discovered in the urine, and are still to be found, though in much smaller numbers, at the present time (March, 1887). The following were the points of chief clinical interest raised:—1st. Can the parasite multipy within the human body, or is an "intermediate host" necessary? 2nd. In the latter case, and in the absence of reinfection (and the conditions for reinfection are not known to exist in this country), what is the "expedition of life" of the parasites, and may the host reasonably expect to outlive his guests? 3rd. Is any parasiticide treatment useful? 4th. What is the method of infection? What precautions should be recommended with a view to prophylaxis?—Dr. SHARKEY had examined specimens from Cairo, showing ova in the kidneys, lymphatic glands, and even in the skin.—Dr. COUPLAND had observed them in specimens, sent by Dr. Kartuliz, in the lungs.—Dr. HANDFORD said in this country it would be a waste of time to try to discover the (probable) intermediate host.

Dr. DREWITT read a paper on the case of a child in whom a patch of Lupus had been divided for treatment into two parts, of which one part had been treated with salicylic acid and creasote, and the other by scraping. An unusual opportunity was thus offered of comparing the two methods. There had been altogether eight applications of Unna's plaster of salicylic acid and creasote during one month, each application having been preceded by washing the patch with a solution of cocaine. At the end of that time the granulation nodules had all suppurated out, leaving little pits surrounded by unhurt, healthy skin. There had been no return of the disease in either part. Unna claimed for the salicylic acid treatment that it removed old bands. This it had failed to do in this case—in fact, some new, thin bands had been formed; but still the scars left by the salicylic acid were smaller and less hard, and had less tendency to contract, than those left by scraping, and, judging from this case alone, there is distinct evidence in favour of the salicylic acid treatment of lupus. The case was shown with a drawing.

Mr. W. ANDERSON read a paper on a case of Hammer Toe, with some remarks upon the deformity. The patient, a youth aged nineteen, had been suffering from hammer toe, presenting the usual characters, and affecting the second digit of the right foot. The history showed that the condition had been noticed from early infancy, and that an aunt and two cousins on the parental side had been similarly affected. The deformity was treated by removal of the head of the first phalanx, which was exposed by a longitudinal incision through the integuments and extensor tendon. The toe was straightened, and healing took place by first intention. The following points with reference to the disease, as illustrated by an analysis of twenty cases, were then brought forward: 1. The complaint is peculiarly one of early life, the period of commencement, in genuine examples, appearing to range between infancy and the age of twenty-one. 2. The lesion is almost always limited to the first phalangeal joint of the second toe, but occasionally appears on the metatarso-phalangeal joint of the great toe (which developmentally must be regarded as belonging to the interphalangeal series). The cases described as "hallux flexus" by Mr. Davies-Colley a few weeks since are of this nature. 3. True hammer toe is often bilateral, but when this is the case one foot is commonly attacked several years before the other. 4. A history of an inherited tendency to the disease may often be obtained. 5. The development of the complaint does not appear to be affected by either sex or class, or to be connected with any special constitutional diathesis. 6. There is no good reason to believe that it is caused by ill-made boots. There is, of course, no doubt that the distortion is sometimes associated, probably as a mere coincidence, with evidences of the habitual use of misshapen foot covering, but in many cases the normal form of the foot is preserved, and there is no reason to believe that the shoemaker has ever been at fault. 7. The essential pathological lesion is a contraction of the plantar fibres of the lateral ligaments and of the glenoid plate, probably the result of a peculiar form of chronic inflammation. Secondary changes of form occur in the articular surfaces, particularly in the cartilage, and may lead to a trigger-like action of the affected joint during forcible flexion and extension. The muscles, tendons, and fasciæ take no part in the etiology, but may be secondarily affected. 8. The treatment recommended is removal of the head of the first phalanx in the manner described. Two specimens, one lent by Mr. Shattock, and some drawings were shown to illustrate the pathology of the affection.—Mr. W. ADAMS said that a study of the dissections would show that it was the fault of the lateral ligaments. Division of these ligaments should be practised, not amputation, between the ages of twelve and eighteen. Mr. Anderson's suggestion was a very valuable one. The pathology still remained obscure.—Mr. NUNN considered that a defective development of the spinal cord was the cause of the deformity. A case of a lady with a hammer toe had a son who did not develop the condition till thirteen years of age.—Mr. R. W. PARKER had seen many cases in young children, even infants, so that the foot covering was not a cause. It was difficult to see why accidental causes should affect the second toe so frequently. Removal of the toe was his practice.—In reply to Mr. Broadbent, Mr. ANDERSON said that he did not know whether the condition was more common in town or country children.

The following living specimens were shown:—Dr. Arthur Davies: A case of Rhythmical Tremors affecting only the Right Arm. Mr. George Eastes: Chronic Spasmodic Affection of Inspiratory Muscles with Loud Crowing Inspiration. Mr. Bernard Pitts: Congenital Scoliosis with other Malformations. Mr. Battle: Osteotomy for Congenital Talipes. Mr. Black: Double Congenital Dislocation of Hip.

ACADEMY OF MEDICINE IN IRELAND.

Exhibition of Specimens.—Treatment of Vesico-vaginal and Vesico-uterine Fistulæ.

AT a meeting of the Obstetrical Section, held on April 1st, Dr. ALFRED SMITH exhibited an Encephalocele. The interesting point was the enormous size of the child, which was 21 in. long and 11 lb. in weight. This was perhaps because the brain had ceased to require food, and the additional supply went to the other parts of the body. The child had come to its full term.

The PRESIDENT exhibited a Multicular Ovarian Cyst, which was peculiar in consisting of two very large cysts and one smaller one, which were all connected by a common isthmus, so that at the operation he first thought it was a case of double ovarian tumour. A large quantity of the cyst fluid escaped into the abdominal cavity, which was therefore washed out with very weak carbolic acid solution. The woman's urine for some days contained a very large quantity of indican, but she made a typical afebrile convalescence.

The PRESIDENT also exhibited a Malignant Growth which had been removed from the cervix uteri by Schroeder's operation. The patient was a strong, stout, healthy, florid-looking woman, and the only symptom was menorrhagia, which had lasted for eight months. The old method of removal was by putting an écraseur round the base of the tumour. The woman had a perfectly afebrile convalescence.

Dr. MORE MADDEN read a paper on the Treatment of Vesico-vaginal Fistulæ. In the present communication the writer confines himself to those more difficult and exceptional cases of vesical fistula consequent on parturition. Amongst these Dr. More Madden includes all cases of vesico-vaginal or vesico-uterine fistula in which the loss of tissue or the position and character of the rupture are such as to preclude the restoration of the former structural integrity of the parts, and in which either new vesico-vaginal or vesico-uterine walls must be built up by plastic operation, or else a new condition of the parts must be established. In most of the instances of vesico-uterine fistula that have come under Dr. More Madden's observation the patients had been delivered instrumentally, and, moreover, were pluriparæ in whom the uterine walls had been previously softened and disintegrated by imperfect involution. In the latter cases there are, as a rule, but three courses available in the way of operative treatment—viz., tracheloraphy in the first instance, followed by a plastic operation on the disruptured vesico-uterine walls; secondly, closure of the os uteri, so as to convert the uterus into an appendix to the bladder; or, thirdly, the same result may be obtained in some cases by turning the cervix into the vesical wound, within the closed walls of which it may be included. In this connexion Dr. More Madden refers to a case in which, after the

normal aperture of the uterus was thus closed, nevertheless the patient subsequently again became pregnant. In some exceptional instances, however, of destruction from sloughing of the entire vesico-vaginal septum, none of the reparative operations usually recommended are feasible or effectual, and in such cases the advisability of closing the vaginal orifice, so as to thus afford a possible restitution of retentive power, becomes a question for consideration. Against Simon's operation for this purpose must be recognised the consequent liability to fatal renal disease which Dr. Emmet holds to be an inevitable result of its performance. Nor should it be lost sight of in this connexion that in some instances the most extensive vesico-vaginal fistulæ may in course of time become cured without any operation by the occurrence of senile atresia of the vagina—a fact of which two cases have come under Dr. More Madden's observation.—Dr. ROE said it was the experience of most of them that in all cases that occurred of vesico-vaginal fistula the deliveries had been effected by instruments. But it would be wrong to let it go forth as the opinion of the Section that the instruments were the cause of these fistulæ. He believed that in the majority of cases the fistulæ were the result of sloughing.—Dr. HORNE said that Dr. Madden, in his paper, had divided fistulæ into two great classes. As regarded the first of these, they were all agreed that where the bands of adhesion were not very great, and the edges of the denuded surfaces could be easily brought together, there could be no hesitation about performing the operation. The great question was whether it should be performed when the loss of tissue at the base of the bladder had been so great that, whether the bands were divided or not, it was not possible to bring the edges of the wound together.—The PRESIDENT said, when they looked back upon the history of vesico-vaginal fistula, it was extremely interesting to find that a disease which at one time was considered almost incurable could now, except in the worst cases, be cured with absolute certainty; and they should never cease to hope that some day even the severer cases should be brought within the power of the gynæcologist. No person in modern times, with the exception of Marion Sims, had done so much to show them how this disease ought to be treated as the late Professor Simon. It was most desirable to draw the attention of young men to the conditions he had laid down as necessary for the cure of these cases. First of all, broad freshened surfaces were required; secondly, all tension should be taken off the edges; lastly, the edges should be brought accurately together by plenty of stitches. Dr. Roe had opened an interesting question as to the etiology of those cases. When he (the President) was first studying them he was under the impression that it was in cases of first childbirth that vesico-vaginal fistula occurred most frequently. But he had not found that most of the cases of the disease that came from the country were cases of first birth; on the contrary, the majority of the women had borne children before; and he thought the occurrence of the disease in them was to be explained by the tediousness of their labours. These considerations point to the fact that it was not great pressure but prolonged pressure that caused vesico-vaginal fistula. Dr. Horne had drawn attention to the circumstances under which stone was likely to form in the bladder. When the bladder was in its normal condition it was emptied from the lowest point, and then its contents could be always cleared out. But in some cases the opening between the bladder and the vagina was high up in the former, and the result was that there was a pocket up to the level of where the fistula was, which was constantly full of unchanged urine. The salts of that urine were then deposited, and stones formed.—Dr. MORE MADDEN replied.

GLASGOW OBSTETRICAL AND GYNÆCOLOGICAL SOCIETY.

THE eighth ordinary meeting was held on May 25th, in the Faculty Hall.

Dr. ROBERT POLLOK exhibited a small Pediculated Polypus which he had removed from the os uteri of a patient who had been supposed to be suffering from prolapsus and had been wearing a pessary, and afterwards read "Notes of Difficulties occurring in eleven years' private Obstetric Practice (2000 cases), with the Treatment adopted." The difficulties alluded to include adherent placenta, funis presentation, anencephalic fœtus, dystocia from obstructing tumour, placenta prævia, post-partum hæmorrhage, puerperal eclampsia, and extra-uterine pregnancy. A discussion followed, in the course of which the diagnosis in the latter case was called in question by Dr. Abraham Wallace, and the author's views as to treatment were freely criticised.

Notices of Books.

The Essentials of Bandaging, with Directions for managing Fractures and Dislocations, for administering Ether and Chloroform, and for using other Surgical Apparatus. With a Chapter on Surgical Landmarks. By BERKELEY HILL, M.B. Lond., F.R.C.S., Professor of Clinical Surgery in University College, Member of the Court of Examiners of the Royal College of Surgeons of England. Illustrated by 144 Engravings on Wood. Sixth Edition, Revised and Enlarged. London: H. K. Lewis. 1887.—This is a deservedly popular book, so much so that a sixth edition has been called for. The whole has been revised, and to some small extent the book is enlarged; but on looking through it we notice some few points in which further improvements could easily have been introduced. The descriptions of bandages and splints are practically unaltered, but we are glad to notice that Mr. Hill gives a caution as to the danger of sloughing following the use of the graduated compress in the treatment of a wound of the palmar arch, and recommends the enlargement of the wound and double ligature of the vessel instead. He might have added that if the bandage affixing the compress is loosened after twenty-four hours without displacement of the compress, the danger of sloughing is obviated. Mr. Tweedy has written a short account of Retinoscopy, and Dr. Poore has added a description of Catheterism of the Larynx. We are surprised that no account of the many convenient uses of the triangular bandage is given; we miss also a description and proper illustrations of the various simple slings for the hand and arm. The old account and woodcuts of reduction of dislocations of the hip by pulleys are still left in, and considering that this mode of reduction is now rarely, if indeed ever, used by an educated surgeon, it would have been more useful to replace these diagrams by others of the modes of reduction by manipulation. A still stranger instance of "survival" under many revises, is the account of the mode of administering a hypodermic injection. We should suppose that there was hardly any room for difference of opinion as to the best way of performing this trifling operation, and that everyone did it by gently pinching up a fold of skin and thrusting in the needle parallel to the surface. But Mr. Hill recommends the surgeon to choose the arm (not the forearm), and to steady the skin "by putting it on the stretch with the left thumb and fingers, while the point of the cannula, held at right angles with the surface, is thrust quickly, with a slight rotatary motion, completely through the skin. We must add one further criticism, and it is in regard to the application of Scott's dressing to a joint. The ointment is called "mercurial ointment," and there is no allusion to the fact that it should be a special preparation of mercury and camphor.

Congenital Club-foot: its Nature and Treatment; with especial reference to the Subcutaneous Division of the Tarsal Ligaments. By ROBERT WILLIAM PARKER, Surgeon to the East London Hospital for Children, and to the Grosvenor Hospital for Women and Children. London: H. K. Lewis. 1887.—Mr. Parker has, in conjunction with his friend and co-worker Mr. Shattock, studied the pathology of club-foot, and the present *brochure* is an amplification and practical application of the paper already published in the Transactions of the Pathological Society. Mr. Parker's views are the outcome of painstaking study of the anatomy of club-foot, and are worthy of the most careful consideration. Put briefly, his teaching is that the cause of congenital

club-foot is malposition in utero, preventing the proper developmental changes in the foot; that not only are muscles at fault, but bones and ligaments too; that in severe cases the shortened ligaments offer great and, it may be, insuperable obstacles to the correction of the deformity, and are the cause of the frequent relapses after tenotomy; that tenotomy should be often supplemented or replaced by division of the shortened ligaments—syndesmotomy as it is called. We believe that Mr. Parker has made a valuable addition to our knowledge and our means of surely remedying one of the commonest of deformities. The book is, however, weak on its clinical side. The pathological argument is complete, but not a case is given to show the practical value of the treatment recommended. We are well aware that the loading of *brochures* with accounts of cases is a vulgar device of unscientific writers, but none the less is it to be wished that Mr. Parker had recorded one or two of the cases in which he has practised syndesmotomy. The book is excellent, but it needs a clinical appendix.

Druitt's Surgeon's Vade-Mecum; a Manual of Modern Surgery. Edited by STANLEY BOYD, M.B., B.S. Lond., F.R.C.S. Eng., Assistant-Surgeon and Pathologist to the Charing-cross Hospital, and Surgeon to the Paddington-green Hospital for Children. Twelfth Edition, with 373 Wood Engravings. London: Henry Renshaw; J. and A. Churchill. 1887.—This is an old friend, but in its new form shows none of the decadence of age, but all the vigour of youth. Mr. Stanley Boyd has amply justified the confidence placed in him by the publishers, and we most heartily congratulate him upon the success of this, which, we believe, is his first literary effort of an important kind. Every part of the book shows signs of careful and judicious revision, and while the well-known characteristics of Druitt's book, which have been appreciated by many generations of students, are preserved, all the chapters have been brought well up to date. The most important alteration made in this edition is the incorporation of a good account of antiseptic surgery in all its branches, and of the changes introduced into pathological views by the recent discoveries of the important *rôle* played by micro-organisms in many morbid processes. The arrangement, the illustrations, and the size of the book have been improved, and it is in every way a trustworthy text-book. The twelfth edition ought to do more than maintain the reputation Dr. Druitt earned.

A Treatise on Chemistry. By Sir H. E. ROSCOE, F.R.S., and C. SCHORLEMMER, F.R.S., Professors of Chemistry in the Victoria University, Owens College, Manchester. Vol. III. Part III.: The Chemistry of the Hydro-carbons and their Derivatives, or Organic Chemistry. London: Macmillan and Co. 1886.—This, the third part of the third volume of the great work which the Manchester professors have in hand, is, after all, only another small instalment, and leaves almost any amount to be completed. The present volume "commences the consideration of the complicated but most important series of bodies known as the aromatic compounds"; in fact, it deals with benzene and its simpler derivatives, including, of course, the phenol and aniline. It is quite equal in value to the preceding volumes, which is saying a great deal. The section on benzene itself is a model of scientific writing; it is eminently practical, with good working directions and clear illustrations, and yet the scientific idea is never lost sight of throughout. As in the previous volumes, unusual prominence is given to the history of each important compound. It is not universally recognised that such history is essential for the true comprehension of the present views. We trust there will be as little delay as possible in the issue of the remaining volumes. The book will remain a landmark in the history of English chemistry. It is unnecessary to praise it, for every chemist in England knows and values it.

Brain: a Journal of Neurology. Edited for the Neurological Society of London by A. DE WATTEVILLE. Part 37, April, 1887. London: Macmillan and Co. 1887.—This, which is the first number of *Brain* since it has been converted into the organ of the Neurological Society, is almost wholly occupied with an elaborate paper by Dr. Bastian, read before that Society, upon the Muscular Sense, its Nature and Cortical Localisation. It would be impossible, within the space of a brief notice, to detail the points laid down by Dr. Bastian, whose argument is directed largely against the doctrines enunciated by Dr. Ferrier. The interest of the subject is heightened by the publication of the full text of the discussion which followed upon the reading of the paper, and was joined in by Dr. Ferrier, Mr. Sully, Dr. Ross, Sir J. Crichton Browne, Dr. Hughlings Jackson, Professor Horsley, Professor Haycraft, Dr. Mercier, and Dr. de Watteville, and the reply of Dr. Bastian to the criticisms of these gentlemen. Beyond this subject, the journal contains a Critical Digest on Peripheral Neuritis by Dr. Pierson of Dresden, and an abstract of a paper by Landouzy and Déjérine on Progressive Atrophic Myopathy involving the Face.

The New Sydenham Society's Lexicon of Medicine and the Allied Sciences.—The thirteenth part of this dictionary, which is edited by Henry Power, M.B., and Dr. Leonard W. Sedgwick, has just been issued. It extends from "Her" to "Ilm," and its publication is another step towards the completion of a work that will in the future be of immense value to those who are fortunate enough to possess it.

Pen and Pencil. Glasgow: Maclure, Macdonald, and Co.—Several numbers of this recently established illustrated weekly newspaper have been forwarded to us. Each part contains eight pages, and with several a supplement is also issued, of high class illustrations and interesting letterpress. As a means of implanting and encouraging the love of the beautiful and refined we are glad to afford it a hearty welcome.

ROYAL MEDICAL BENEVOLENT COLLEGE.

AT the annual general meeting of the governors of the Royal Medical Benevolent College at Epsom, held on May 25th, Mr. Hird, who has filled the office of treasurer for many years, resigned in consequence of giving up practice in London. He was unanimously elected a vice-president, and received a most hearty vote of thanks for his services. Dr. Holman, of Reigate, on the recommendation of the council, was elected as the new treasurer. He is well known in the profession, and has been an earnest supporter of the College for a lengthened period.

The aid given by this institution to the aged and helpless by pensions, the education free of all cost afforded to the children of the less prosperous members of the profession, and the really first-rate education given to sons of any medical practitioner for £55 a year, are all so many reasons why every member of the profession should support the College, and yet we are grieved to say not one-fifth of our number give anything. It is not, perhaps, sufficiently known that the College has several good scholarships to the universities. It has seven free medical scholarships to the metropolitan hospitals, besides numerous other minor exhibitions. With Dr. Jonson, Sir Edward Sieveking, Mr. France, Sir Joseph Fayrer, Sir Trevor Lawrence, M.P., Mr. Morrant Baker, Mr. Page, Mr. Malcolm Morris, Dr. Frederick Taylor, and Mr. Propert, the son of the founder, on the Council, we cannot but hope that the new treasurer and his colleagues may receive a generous pecuniary support to enable them to carry on the charitable objects of the institution with no niggard hand, and, at the same time, to be shown such confidence by sending pupils there as may secure a triumphant success for their efforts to place Epsom College in the front rank of the schools of the country.

THE LANCET.

LONDON: SATURDAY, JUNE 4, 1887.

THE lecture delivered by Dr. KLEIN last week at the Royal Institution placed before the public the complete evidence upon which is based the opinion that the infection of milk with the virus of scarlet fever may result from a disease of the cow. Although the papers which have from time to time appeared in the reports of the Medical Officer of the Local Government Board have indicated the insufficiency of the more commonly accepted methods of milk infection to account for this infection, and although, therefore, it was seen that some condition of the cow herself might be responsible for this occurrence, it was not until the publication of Mr. POWER'S investigation into scarlet fever caused by milk coming from a farm at Hendon that evidence was obtained that the disease was due to a particular affection of this animal.

It will be recollected that the appearance of scarlet fever among the drinkers of milk from one and another shed on this farm coincided with extraordinary exactness with the appearance of a disease among the cows inhabiting these sheds, and that further proof that the cow and the human disease were related was afforded by Dr. KLEIN, who discovered in certain sores on the udders of the affected cows a streptococcus which, when inoculated into calves, caused the same disease as that from which the cows at Hendon suffered; and that, further, the changes in the viscera of these animals resembled those which are found in the human subject after death from scarlet fever, and that the same micrococcus was discovered in their blood and tissues as was found in the Hendon cows.

Since this time an outbreak of scarlet fever at Wimbledon, again due to milk, gave opportunity for Dr. KLEIN to extend his inquiry. A monkey, one of the milk drinkers and a sufferer from its infective properties, had died, and an examination of its body by Dr. KLEIN left no doubt that the cause of death was scarlet fever. From the blood of this monkey he obtained by cultivation the same micrococcus as that found in the Hendon cows. Again, some tins of condensed milk which were under suspicion of having produced scarlet fever in a number of persons who had partaken of it were forwarded to Dr. KLEIN, with the result that among other organisms the same micrococcus was distinguished. The action of this microbe was tested on animals, and communicated to them the same disease as that observed at Hendon. Dr. KLEIN finally directed his attention to persons suffering from scarlet fever, and discovered in the blood of the general circulation a species of micrococcus which, on cultivation in nutritive gelatine, agar-agar mixture, blood-serum, and other media, proved to be in every respect identical with that obtained from the Hendon cows.

The identity of the human and the animal organisms having been thus far established, both were tested on animals and the results compared. Mice, especially wild mice, when inoculated or fed with the streptococcus, both animal and human became affected exactly in the same manner. The majority of them died between seven and twenty days afterwards, the post-mortem examination revealing great congestion of the lungs and congestion of the liver, spleen, and cortical part of the kidney. From the blood of these animals, taken directly from the heart, cultivations were made, and the existence of the same micrococcus proved. For the remaining experiments calves were employed. Four being fed and four being inoculated with cultivations from cases of human scarlatina, all eight animals developed the disease, both cutaneous and visceral, identical with that produced in the calves that had been infected last year with the micrococcus from the Hendon cows. And, lastly, from the blood taken from the heart of calves thus inoculated with human scarlatina, was recovered by cultivation a micrococcus possessing all the characters of that of the Hendon cows and of the cases of human scarlatina.

The evidence is therefore complete, and we may accept as an assured fact that the conclusions to which Mr. POWER'S investigations of last year pointed were absolutely correct. It is impossible to exaggerate the importance of these observations, both in the saving of human life which they will ultimately effect, and in the security they will give to the interests of agriculturists when further knowledge of the bovine disease enables it to be more easily recognised, and its nature to be better understood. Unfortunately it may yet be some time before the practical lessons which are taught by Mr. POWER'S and Dr. KLEIN'S work are turned to useful account.

While Dr. KLEIN has been thus engaged in the completion of this chain of evidence, another department of the State, the Agricultural Department of the Privy Council Office, has been employed in the production of a document which will excite considerable surprise. The Privy Council had ordered an inquiry into the subject matter of Mr. POWER'S report, but the investigation proved abortive, for we learn from a letter addressed to the Privy Council by Professor BROWN that, owing to the alarm which was occasioned among dairy farmers by the publication of the report of the Local Government Board, it was found impossible to obtain any information from them of the existence of the disease among their herds. Nevertheless, the department appears to have felt the necessity of publishing a report, and they have therefore issued one by Professor AXE, who inspected the Hendon cows at the instigation of the British Dairy Farmers' Association, but arrived upon the scene at a time when, to use his own words, "the eruption on the teats and udder, which was the characteristic feature of the complaint, had in the majority of cases altogether disappeared." Professor AXE has therefore based his description of the malady also upon "information obtained from the farmer and his herdsmen, as well as from other dairymen to whose herd the disease spread." It is obvious from this statement that Professor AXE has from the beginning assumed that the malady of the Hendon cows was identical with that of other herds, which, he states, without giving his source of information, had been associated with those introducing the scarlatinal disease upon the farm; these other herds do not appear to have been seen by Professor AXE at the time of their illness, and the description must be, therefore, based upon his own

limited experience of the Hendon malady, and upon the observations of dairymen of the ailment or ailments of other herds, which may have been suffering from one or more of the vesicular diseases which attack the udder of the bovine animal, and which are perhaps affections totally different from that with which Mr. POWER was concerned. Subsequently Professor AXE proceeded to ascertain whether the milk of these other herds had communicated scarlet fever to the drinkers of their milk; and, failing to find evidence of this occurrence, he appears to have concluded that the malady of the Hendon animals was not responsible for the scarlet fever which Mr. POWER investigated.

So serious a conclusion needs to be supported by evidence which will enable some opinion to be formed of its accuracy, but, strangely enough, although adopted by a department of the State, no opportunity is given for such judgment to be arrived at. In the first instance, it is most important to know how far we may trust the observation of the dairymen upon whom Professor AXE relies for information as to these other herds, and we are not even told when inquiry was made of them, and, therefore, whether dependence is being placed upon the memory of these people long after the event. In the second instance, no information is given which would enable anyone to judge of the sufficiency of the inquiry as to the effects of drinking the milk of these herds, nor even is the statement advanced as to the period when inquiry into this branch of the subject was made. There is, indeed, much reason for believing that these steps were not taken until more than a year after the termination of the Hendon outbreak, when all clue would likely enough be lost, and, if so, the publication of this paper sadly needs justification.

Since the publication of Dr. BUCHANAN'S official report and Dr. KLEIN'S lecture at the Royal Institution, the subject is, so far as its scientific position is concerned, outside the region of controversy. The evidence conclusively establishes that the cow malady caused human scarlatina.

THE Anti-vivisection Society of London is still so far alive as to have its May meeting, which was held last week; but it would seem from the report of the proceedings that there is not much animation about it. The chief object of the speakers seemed to be to convince themselves and their audience that the great majority of medical men are against this practice. If by this is meant that the sentiment of humanity in the medical profession is strong, and is painfully touched by the necessity for experiments on animals, we readily admit and accept so just a compliment. We have never erred from the line of a regretful admission of the necessity for, and the undoubted value of, experiments on animals, with a strong request that as far as possible they should be rendered painless. The late Editor of this Journal was known for his love of animals, and his intolerance of anything but kindness to and consideration for them; and in this, as in so much else, he represented accurately the profession. In this sense, then, we will allow that the medical profession feels strongly on the subject of vivisection, but only in this sense. To represent the profession as longing for an overwhelming expression of public opinion—to say as Mr. HAWEIS did, that it is difficult to get at the real opinions of medical men, or, as Dr. HAUGHTON did, that doctors, even of the highest eminence, are afraid to express views which happen to be in opposition to those of the medical profession, is to make statements which are inaccurate, and which refute each other. The medical profession is a liberal profession; it is bound by no creed; it swears by no master; it is confronted daily and nightly with enormous suffering, which enters neither into the imagination nor the experience of ordinary men. Not only has it to face this suffering, but it is expected to mitigate, if not to abolish it. It is this which makes the medical man tolerant of what is called vivisection, which in his hands is a merciful business. What is it that permits men to abuse vaccination so glibly, and clamour for its abolition? Chiefly the fact that by the very beneficence of the operation they disparage they never see small-pox. Experience of this terrible disease would send the race of anti-vaccinators to the nearest vaccination station. So with anti-vivisectionists, they do not see disease, and are not responsible for its treatment. But medical men are. They know, moreover, the solidarity of men and animals in the matter of disease, and that their pathology is so far common that discoveries which benefit men will also, in most cases, benefit the lower animals. These animals, indeed, so far have been large gainers by the discoveries made with the help of experiments on animals, as in the case of anthrax. To read the speeches and the books of anti-vivisectionists, one would think that animals had no diseases, and no interest in the progress of the art of medicine. No assertion could be more at variance with truth, or even with the Scripture which tells us that the "whole Creation groaneth and travaileth in pain." Let the enormous mass of disease in animals be realised, and it will appear but fair to them, as well as to men, to make them parties to those great discoveries by which disease is to be averted. We will not depart from that studied moderation of language which has characterised British men of science in urging for the right to perform careful and, wherever possible, painless experiments on animals, with a view to a deeper knowledge of life and of the things that destroy it and save it respectively. We confess to finding it hard sometimes to preserve this moderation and to be perfectly cool with an opponent who may be willing to shoot an animal and thereafter to eat it, but who objects to the physiologist or the physician performing an operation that may save herds of animals and thousands of human beings. But moderation has its reward, and in regard to this very subject has had its reward already. We may respect the motives of men who object to an experiment on a dog even if it is to save the life of a man, but we cannot admit their sense of proportion or their intelligent interpretation of Holy Writ, which very clearly indicates the different value of the life of man as compared with that of animals.

SINCE the true nature of the tubercular virus was revealed by KOCH, there has been a constant endeavour to bring the accepted facts of clinical observation into harmony with that discovery. The range of tuberculous disease has been widely extended, and especial prominence given to that form which in its abundance far exceeds all others—we

mean pulmonary phthisis. According to the knowledge gained of the invariable coincidence of the bacillus of tubercle and of phthisis, we are bound to include the lung affection in the same pathological category as that of other tubercular disease in any part of the body. When, therefore, we speak of the etiology of phthisis, we mean the etiology of tuberculosis; and when we indicate the fact of inheritance as one of the most striking of the etiological factors in phthisis, we must add the liability to the transmission of any one of the several forms of tubercular disease. This is so obvious that it barely needs to be pointed out, and yet we venture to think that it is sometimes lost sight of. It is not the pulmonary disease that is inherited, but the tuberculosis, of which the pulmonary affection is but one manifestation; and the fact that we habitually speak of "inherited *phthisis*" is merely because that is the most common of all tubercular disease. If, therefore, we seek to discuss the influence which the bacillary doctrine has had upon the problem of the inheritance of phthisis, we must embrace in our view the whole range of tubercular disease. The question, then, is whether tuberculosis, like syphilis, can be directly transmitted from parent to offspring; and if the answer is in the negative, we must be prepared with a satisfactory alternative to explain the undoubted influence of heredity in the etiology of the disease.

The subject is surrounded by difficulties, and we can hardly wonder that the medical world is divided in opinion upon it. Professor ORTH has recently drawn prominent attention to it,[1] but current literature abounds with references to it. It is simple and easy to evade the question by implying, as VIRCHOW did thirty years ago, that it is not tuberculosis that is transmitted, but only a special vulnerability of tissue or organ; and this explanation may probably be the true one, unsatisfactory as in some respects it is. Still, before accepting it we are bound to see how far it can be supported by facts, and how far it harmonises with the central fact of all—viz., the organised virus, the bacillus. The analogy with syphilis, in many particulars so striking, is hardly borne out in this question of inheritance. That the parent imparts the syphilitic virus to his or her offspring, either directly from the germ or sperm cell or through the medium of the placental blood, is absolutely proved by the existence of congenital and fœtal syphilis. Now, in tuberculosis there is hardly a single well-authenticated case on record of the disease being present in the fœtus or the new-born. The one or two instances of fœtal tuberculosis are not beyond suspicion of being examples of syphilis with widespread visceral lesions, and perhaps the only indubitable case is that of a calf which JOHNE records. But even if there were more cases to be substantiated, it is plain that, as compared with syphilis, they would form but an infinitesimal proportion in the whole number of cases of inherited tuberculosis; and the possibility of accidental infection *in utero* would be quite a legitimate explanation for such a rare occurrence. At any rate, it would be more legitimate than the endeavour to clench the analogy with syphilis by assuming that inherited tuberculosis is always latent, and that what is the exception in the former disease is the rule in the latter. The positive arguments in favour of direct transmission are mainly based upon such facts as those adduced by LANDOUZY—viz., the detection of bacilli in the vesiculæ seminales of tubercular subjects, without actual disease of those organs, and the experimental inoculation of tuberculosis in guinea-pigs by the injection of the spermatic fluid from a tubercular subject. In face of the transmission of syphilis, it cannot be contended that it is impossible for the sperm cell or germ cell to be primarily infected; but the proof of such infection is wanting in the case of tuberculosis, or is at least so meagre as to be unimportant. In his very suggestive work just published, Mr. CANDLER,[2] who adopts the malarial doctrine of tuberculosis, says: "In syphilis the microbe is in the blood from the beginning to the end of its parasitism, in phthisis the irruption of the bacillus into the blood is the first scene of the last short act in its career as a parasite in the one host. Hereditary syphilis therefore, in addition to its being clearly established, may be readily apprehended, but hereditary phthisis in the sense implied would appear to be a physical impossibility."

Nevertheless, in spite of the absence of evidence of congenital tuberculosis, and the fact that inherited phthisis delays its appearance mostly till puberty has been passed, the occurrence of infantile tuberculosis is by no means so rare as is generally believed. In a paper read at the Copenhagen Congress, Dr. HELLER showed that whereas out of a total of 1300 post-mortem examinations in infants and children he had met with only one case of tubercular disease as early as nine weeks of age, yet the proportion increased with considerable rapidity as the age advanced, even in the first years of life; and M. LANDOUZY has contributed from his recent experience at the Tenon Hospital, Paris, details of no fewer than seven fatal cases of tuberculosis in infants ranging from six weeks to twelve months, among twenty-three cases of death during the first quarter of this year.[3] It may be admitted that infantile tuberculosis is common (although infantile phthisis is exceedingly rare) without necessarily concluding that the disease has been directly inherited—that is, that it is congenital. There is always a possibility of post-uterine infection by the milk of a tubercular mother or by exposure to the vitiated surroundings of a home inhabited by infected parents. It is more reasonable to admit acquired disease than to assume that during fœtal life and for a few weeks subsequently the disease remained dormant. From these and other considerations, we are almost impelled by the bacillary doctrine to believe that the old assumption is the true one—viz., that inheritance of phthisis (and of tuberculosis in its widest sense) is not an inheritance of the disease itself, but of a special proclivity of tissue to the disease. It is the soil that is suitable for the growth of the bacillus, and not the bacillus, that is transmitted. As KOCH says, "hereditary tuberculosis is explained most naturally by supposing that the infective germ itself is not inherited, but rather certain peculiarities favourable to the development of germs which may later on come into contact with the body; in fact, it is the predisposition to tuberculosis which is inherited." The same conclusion is reached by Professor ORTH, and it

[1] Aetiologisches und Anatomisches über Lungenschwindsucht. (Berlin: Hirschwald. 1887.)

[2] The Prevention of Consumption. (Kegan Paul and Trench, 1887.)

[3] Rev. de Méd. May, 1887.

is the one which is most in consonance with experience; but, as Professor ORTH remarks, it by no means gets rid of the fact that the disease is infective.

IN our last issue we referred briefly to the recommendations of the Practical Education Committee of the General Medical Council on the question of pupilage, and pointed out how inadequate was the suggestion of a six months' pupilage taken in the long vacations after the passing of the examinations in anatomy and physiology. We regret that the part of the report which deals with the final examinations is equally unsatisfactory. Its recommendations are unworkable. It is suggested that the extension and searching power of the clinical examinations would be facilitated "if the 'final' or qualifying examination were divided into two parts, of which the ultimate should consist mainly of clinical work and the personal application of diagnosis, prognosis, and treatment to set cases, leaving to the penultimate the testing of the knowledge possessed by the candidate of the other subjects contained in the curriculum of school work. It is also recommended that there should be an interval of at least twelve months between the two parts of the final examination, and that this interval should be passed in such occupations as will involve the charge of patients under the supervision of competent persons recognised by the authorities of the school at which the candidate has been educated, which authorities should be responsible for the genuineness of the evidence afforded of the candidate's diligence and care of such number of cases in medicine, surgery, and midwifery as the examining body shall deem expedient." We have every sympathy with attempts to make the qualifying examinations as thoroughly practical in medicine, surgery, and midwifery as is possible, and should have welcomed and supported any proposals which would have really secured this object, or even tended towards this end. For example, the committee might have pointed out that those examining bodies which only require a certificate of attendance on *six* cases of labour were doing very little to secure an efficient practical knowledge of obstetrics, and this is the less pardonable because everyone must recognise the impossibility of a really practical examination in this branch of the medical art. In Ireland the regulations of the examining boards on this question are more stringent than in England, where attendance on twenty cases at least is insisted on by all the present authorities; but in Scotland only six cases are required by any qualifying body, whether University or Faculty. Practical midwifery is at a minimum; theoretical midwifery has to be cultivated to its highest point of excellence by the unfortunate pupil. "Two courses of midwifery of fifty lectures each are reckoned equivalent to one course of one hundred lectures, provided they embrace different departments of obstetric medicine." Again, it would have been worthy of consideration whether operations on the dead subject should not be made compulsory in every surgical examination, as well as the application of bandages and the marking out of the surgical landmarks on the living body. In medicine, should not every candidate be compelled to go through a strict examination both at the bedside and in the out-patient room, and thus have his knowledge tested both of severe and common cases of disease? And could not his therapeutical knowledge be readily and thoroughly examined into at the same time? By such suggestions the practical element in medical education would quickly be increased, for every student is keen enough on learning what he knows will be required of him by the examiner. But the recommendation of a twelve months' interval between two parts of a final examination is quite outside the practicable. There is now a compulsory two years' interval between the second and the qualifying examination at the Conjoint Board, and this interval would, by the adoption of the recommendation referred to, be extended to three years between passing the second examination and obtaining a licence to practise; for if the penultimate part of the examination into the theoretical knowledge embraced in the later part of the curriculum is of any value whatever, it cannot take place until after the present interval of two years. Theoretical surgery and medicine, midwifery, forensic medicine, and pathology, to say nothing of hygiene and mental diseases, cannot be studied under two years, and adding another year compulsorily to the curriculum is impossible, both on the score of time and expense. Another year devoted to medical study is the most valuable boon that can be given by the parent to his son, but his examinations must be finished for him to obtain the greatest benefit from it. His time can then be wholly devoted to the practical element, and he can follow with every advantage the special departments of his hospital, where he can see any number of common diseases, whether of the eye, ear, throat, or skin, gynæcological or exanthematous, and quickly become skilled in their diagnosis and treatment. A year spent thus might not be less profitably employed than in the charge of patients under the supervision of competent persons recognised by the authorities of the school at which the candidate has been educated. Moreover, how could the authorities of a school guarantee the thoroughness of any supervision exercised by practitioners outside their own body? We cannot hope that any improvement in the practical element of medical education will be the outcome of this report, and we are sorry that the committee did not more fully consider the questions involved before they drew it up and allowed it to be entered on the Minutes of the Council.

Annotations.

"Ne quid nimis."

THE SUPPLEMENTARY CHARTER.

ELSEWHERE we publish an abstract of the petition of the Royal College of Surgeons to the Queen for a Supplementary Charter. We have practically discussed all the points contained in it so often that it is needless to do so again on the present occasion. We cannot refrain, however, from pointing out a feature which appears to have been recently introduced by the Council apparently for the purpose of keeping control to some extent over the election of the Council. In the last clause it will be noticed that the Council desire to obtain the power to compel a certain number of Fellows to be present *in propriâ personâ* in order to legalise the election by voting papers, this number of Fellows to be such "as the Council may from time to time think fit to direct." It is clear that, if election by voting

paper is to be legalised by Charter, it should be unconditional of any such absurd regulation as the Council appear anxious to introduce. Such a restriction can serve no useful purpose; if it do serve some special purpose, not obvious to outsiders, then the number of Fellows who are to attend personally should be fixed by Charter, and ought not to be allowed to depend on the pleasure of a body like the present Council, who have so persistently ignored all the representations which have been made to them from time to time by the body corporate. There is one other point we may briefly allude to—viz., the proposal to empower the Council to elect annually to the Fellowship ten Members instead of two, as under existing rules. Unless a very different class of men are to be elected to the Fellowship from those originally contemplated, this rule will be useless; for the Council have, so far, not always availed themselves of their present power of electing two Members to the highest grade. We view with disfavour any plan which, on the one hand, tends to depreciate the intrinsic value of the Fellowship, or which gives the Council the means of bestowing, at all largely, a qualification which should be reserved strictly for those who have rendered special service to surgery in one way or another. For the latter purpose, the powers already possessed by the Council seem quite adequate. It would be a waste of time, under present circumstances, to discuss at greater length the abstract in question. We must wait the course of events, and trust to the outspoken wishes of the Fellows and Members, and to their respective deputations which are to wait upon the Lord President of the Council for the purpose of laying them properly before him.

UNIVERSITY COLLEGE AND A TEACHING UNIVERSITY FOR LONDON.

THE arguments which we have so frequently put before our readers as to the advantages which would be obtained by medical students if a Teaching University were founded in London, were well summarised in the speech made by Sir George Young at the distribution of prizes at University College on the 1st instant. The inefficient character of the changes suggested by the Senate of the University of London, and the necessity for the establishment of a local University in London as well as an Imperial Examining Board, were ably pointed out. It is obvious that the movement for establishing a Teaching University in London will go on, and that University and King's Colleges must take the chief, if not the entire, responsibility for forming the Faculties of Arts and Science, and the other medical schools must combine with these to form a Faculty in Medicine. Such changes cannot be foreshadowed without exciting the jealousy of the University of London, which can hardly be expected to look with equanimity on the secession of its two largest and oldest London Colleges so soon after that of Owens College. It is therefore not a matter of surprise that several members of the Council of University College, closely identified with the existing University, have followed the example of Lord Kimberley, the President, and resigned their seats on the Council.

METROPOLITAN ASYLUMS BOARD.

AN interesting report by the Chairman of the Metropolitan Asylums Board has been published, giving an account of the work performed during the fifteen months ending March 25th of the present year. Mr. Galsworthy is able to congratulate the managers on the comparative absence of small-pox from London, and properly claims that some portion of this freedom from disease is due to the existence of opportunities for the isolation of infectious persons. He comments upon the endeavours of the managers to acquire the legal recognition of the position which it has involuntarily assumed in providing hospital accommodation for all classes of the population. Deputations to successive presidents of the Local Government Board on this subject have, he says, only resulted in the adoption of incomplete measures, in consequence of which the Metropolitan Asylums Board has been called upon to do the work of vestries and district boards, but without any legal recognition of responsibility. The proposal that the sanitary authorities should enter into contracts with the Asylums Board for the purpose of the treatment of all classes of the infectious sick has led to no other result than the passing of the Act of 1879 giving permission for this purpose—a permission which, it is needless to say, has not been acted upon. This class distinction between those who are paupers and those who are not leaves London in an unfortunate position with regard to the provision of hospital accommodation; Mr. Galsworthy's suggestion, therefore, that the Local Government Board should introduce a Bill into Parliament with a view to putting an end to these difficulties is one which should receive general support. Among the important arrangements made by the managers during the past twelve months in connexion with the treatment of infectious disease are the adoption of a regulation whereby the services of medical superintendents and assistant medical officers appointed to any infectious hospital will be available for any other hospital of the managers, and the appointment at the hospitals of duly qualified medical men to act as clinical assistants. The first is obviously needed in the interests of the public service, for without such power of transference of officers the managers are compelled to retain a staff at institutions which are for months absolutely empty; the second is necessary to enable medical men to study more thoroughly the diseases which are to be found in the hospitals of the Metropolitan Asylums Board. We note with pleasure that a committee has been appointed by the Board for the purpose of increasing the value of the statistical information which is obtained from every institution. Small-pox and vaccination statistics specially need to be carefully recorded, and an improvement of the methods adopted will lead to valuable results.

ABSENCE OF FREE HYDROCHLORIC ACID IN THE GASTRIC JUICE.

THE diagnostic value of the absence of free hydrochloric acid in the gastric juice in cases of malignant disease of the stomach is discussed at some length in a recent paper by Dr. V. G. Nechaieff of St. Petersburg. For the detection of free hydrochloric acid no less than thirteen different tests have been proposed. Of these he considers the following to be the most useful:—1. A solution of tropeolin in water, as proposed by Edinger; this has of itself a yellow colour, but when brought into contact with a solution containing 0·01 per cent. of HCl it becomes a dark cherry red 2. Methyl violet becomes blue on the addition of 0·025 per cent. of HCl. 3. Congo paper shows a blue tinge on being immersed in a solution containing 0·025 per cent. of HCl. 4. A mixture of three drops of liquor ferri perchloridi with the same quantity of carbolic acid in twenty cubic centimetres of water shows the presence of lactic acid or its salts by becoming yellow; but if free hydrochloric acid is also present the reagent becomes colourless. This is therefore an excellent test for free hydrochloric acid, when lactic acid or the lactates are present. Dr. Nechaieff advises that all these tests should be applied in each case. He found that in cases of carcinoma of the stomach, and apparently in carcinoma of the œsophagus, absence of free hydrochloric acid constituted the rule and its presence the exception, and is disposed, therefore, to think that its absence affords a practically useful diagnostic sign in cases where cancer of the stomach or œsophagus is suspected. Thus, in seven cases of carcinoma of the pylorus, though 142 exami-

nations were made, free hydrochloric acid was never found, though lactic acid invariably existed; and, again, in 105 examinations of four patients with carcinomatous stricture of the œsophagus no free hydrochloric acid could be detected. In a case of cancer of the rectum, however, the presence of free hydrochloric acid in the contents of the stomach was very distinct.

CERTIFICATES OF DEATH.

IN a recent annotation respecting the Toxteth-park poisoning case, it was suggested that all cases in which, from the sudden character of the death or other suspicious circumstances, the medical attendant had a doubt as to its being a death from natural causes, should be referred by him to the coroner of the district. No doubt a difficulty is created by the wording of the 20th section of the Births and Deaths Registration Act of 1874, which is as follows:—

"In the case of the death of any person attended during his last illness by a registered medical practitioner, that practitioner shall sign and give to some person required by the Act to give information concerning the death a certificate, stating, to the best of his knowledge and belief, the cause of death."

A correspondent wishing to know whether he or any other medical practitioner could refuse to give a certificate, communicated with the Registrar-General, from whom he received, through the secretary, a reply of which the following is an abstract. After quoting the section of the Act just given, the letter adds:—

"The duty of the medical practitioner is thus very clearly explained by the 20th section of the Act, which admits of no other interpretation..... The medical practitioner under the circumstances described in the Act has no option in the matter; he cannot withold the certificate. He can of course, if he sees fit, himself communicate with the coroner or police with regard to any suspicious circumstances which may have come under his notice when in attendance during the last illness of the deceased; but he may safely leave this duty to the registrar, who in his 'Regulations' is directed to report to the coroner (on a form provided from this office) all deaths caused directly or indirectly by violence, or which have been attended by suspicious circumstances, as well as sudden deaths, and every death the cause of which is stated to be unknown."

It is unfortunate that the Act takes no cognisance of those cases in which it is very difficult, if not impossible, to give a certificate, and in which it would be, medically speaking, much better not to give one. For instance, a practitioner might be in doubt as to whether the cause of death were due to "English cholera" or "irritant poisoning." How is the certificate to be so worded as to induce the registrar to refer the case to the coroner without prejudice to the medical attendant should his suspicions be unfounded? We are by no means so assured as the Registrar-General would appear to be of the safety of leaving this discretionary power to the district registrar. Coroners have frequently complained, and with too much reason, of the delay which often occurs before they receive information of a death in which an inquest has to be held. This delay must be increased, if not caused, by presenting for registration a certificate useless for that purpose, and which must be referred to the coroner—more especially if these officials reside in country districts far from each other. The question is not without its difficulties, but these will be more easily surmounted by meeting them at once, and not shifting them on to the shoulders of others. It will surprise many readers of THE LANCET to learn that they cannot refuse to give a certificate of death, even when such can only be a merely formal one to be passed on by the registrar to the coroner. The obviously better course would be for the medical attendant himself to refer to the coroner every case in which he had doubts as to the propriety of giving a certificate—not necessarily because an inquest was called for, but because the coroner is the authority to whom all such cases ought to be referred, and who is the official responsible for making full inquiry and for the results thereof.

THE GENERAL MEDICAL COUNCIL.

IMMEDIATELY after the termination of the session of the General Medical Council, the printed Minutes of the Council, of its Executive Committee, and of its English Branch Council, including the Transactions from Feb. 25th to May 20th, were published. The volume contains information of the greatest value to the profession and to those interested in its government. In it will be found, in addition to the President's address, all the communications which have taken place concerning the appointment by the Council of assistant examiners to the Apothecaries' Societies of London and Ireland; also a statement of a case and opinion by the Attorney-General and the Solicitor-General in regard to the combination of licensing bodies under the new Medical Act, as well as the proceedings relating to the appointment of inspectors of examinations. Among other documents of interest is the report by a committee on practical education, to which we referred at length in our last number. The early appearance of this volume, with an excellent index, will be appreciated by those interested in medical education.

OXYGEN AS AN ANTIPYRETIC.

AT the last session of the Royal Academy of Medicine of Madrid, the President introduced an innovation by allowing Señor Don Dr. Francisco Valenzuela, a non-member, to read a paper. The subject was "The Effect of Oxygen of High Tension upon the Animal Organism," and the amount of original investigation reported in it may well serve to justify the President of the Academy in departing from the time-honoured custom of confining the papers and speeches to academicians. Don Valenzuela began his researches by submitting rabbits to pure oxygen at various pressures. No effect on the temperature was produced at a lower pressure than 760 mm., or five times the ordinary tension of the oxygen in the atmosphere. Under this, however, a rabbit whose initial temperature was 38·7° C. after an hour's sojourn in the chamber presented a temperature of 37·9° C. At still higher pressures of pure oxygen greater falls of temperature occurred. The highest tension at which experiments were made was 1520 mm.; this reduced a rabbit's temperature in an hour from 38·4° to 32·2°. The general effect on the animals of oxygen at the higher tensions was to produce a temporary torpor, and they came out of the chamber covered with moisture; in a very short time, however, they entirely recovered their ordinary condition. Some experiments were also made on the effect of oxygen of high tension on the febrile state, by inducing septicæmia in rabbits and comparing the course of the disease in those which were subjected to the action of oxygen with that in others kept under ordinary atmospheric conditions, with the general result that pyrexia appeared to be reduced by the sojourn in the oxygen chamber. In one case two rabbits were each inoculated with a cubic centimetre of serous fluid with a putrid smell from a dead body. One of them was then subjected for two hours to the action of oxygen of a tension seven times higher than that which it has in the air. Four hours subsequently the temperature showed a reduction of 1·7° C., the temperature of the other rabbit at the same time being 3° C. higher than the normal. The next day the body heat of the first rabbit was 1·5° C. and the second 3·1 C. above the normal. The first was replaced in the oxygen chamber under the same pressure, and for the same length of time as before,

which reduced the temperature 2·2°—that is to say, to 0·7° below the normal. On the third day it was only 1° C. above the normal, while the second rabbit died. No further treatment was resorted to, and on the fourth day the first rabbit had regained its normal physiological condition. It was found in the various experiments made that when a small quantity of septic matter only was introduced, a single session in the oxygen chamber was sufficient to destroy the effect of the virus, but that if a high degree of sepsis was induced the poison was only partially destroyed by a single session. Dr. Valenzuela then made some observations on patients. A young man was attacked by pneumonia, affecting both lungs, on April 26th. On the morning of the 27th the temperature was 39·5° C., and in the evening 40·4°. He was then put into the pneumatic chamber containing pure oxygen at a pressure of 950 mm., or six times the ordinary tension of atmospheric oxygen, for an hour, after which his temperature was 1·7° C. lower. The next morning it was 39·2°. A second session in the chamber produced no immediate reduction, but four hours later the temperature was 39·0°. That evening it was 39·5°, and it gradually returned to normal, though no further sessions in the oxygen chamber were ordered. The man made a rapid recovery. Dr. Valenzuela likewise mentioned some other cases of pneumonia and tuberculosis on which the oxygen treatment appeared to have a beneficial action.

THE CROWN PRINCE OF GERMANY.

WE are glad to be able to give in fuller detail this week an account of the Crown Prince's illness. It appears that in January his Imperial Highness began to suffer from slight hoarseness, and early in March Professor Gerhardt discovered a warty growth attached to the left vocal cord, which he treated by touching with the electro-cautery. Its size having been reduced by this means, the Prince was advised to go to Ems, where he remained about six weeks. On his return he was found to be no better as regards his hoarseness, and the growth had somewhat increased in size. Professor Tobold was then called in, and after a consultation with the Emperor's and Crown Prince's physicians, Von Lauer and Wegner, it was thought that the growth was of a malignant nature, and at their request Dr. Bergmann's opinion was sought. He was inclined to confirm the diagnosis. It was decided that an external operation was necessary, but whether it was to be excision of the larynx or thyrotomy was not settled definitely. In consequence of the strong feeling at Court that this operation ought not to be done unless absolutely unavoidable, on account of its attendant danger to life and great impairment of voice, even if successful, Dr. Bergmann declined to take the responsibility as the operator, unless the impossibility of the removal of the growth by inter-laryngeal methods was confirmed by Dr. Morell Mackenzie. Immediately on arriving in Berlin on Friday, May 20th, a consultation was held, at which Dr. Mackenzie met all the medical men above mentioned. On making a laryngoscopic examination, Dr. Mackenzie found a sessile growth about the size of a large split pea, but in shape more elongated, attached to the posterior portion of the left vocal cord on its inner and upper surfaces. He urged that the more serious operation should not be performed before a portion of the growth had been removed for microscopic examination. This had not been done because it was considered impossible owing to its small size and sessile character. The following morning another consultation was held, at which Dr. Mackenzie succeeded in removing with forceps a piece of the growth about the size of a tare. Professor von Virchow, having examined microscopically the portion taken away, pronounced it to be a benign growth. He said that the epithelial cells were increased in size and number. He further stated that, as the portion removed included a complete section of the growth and the surface of the vocal cord beneath, as clearly demonstrated by the presence of some of the longitudinal elastic fibres of the latter structure, he considered that there was no reason to suppose that any remaining portion of the growth was of a cancerous nature. Professor von Virchow also said that he thought the thickening was the result of chronic inflammation, which accorded with the history of the case. Dr. Mackenzie leaves London for Berlin on Sunday night, and we shall hope to hear that he has been successful in removing the entire growth, which is the source of so much trouble to his Imperial Highness and of so much anxiety to others.

TERRIER'S NEPHRECTOMY.

THE last word has not yet been said upon the relative advantages of the lumbar and the abdominal methods of nephrectomy. Each has its merits and its demerits, and M. Terrier has attempted to combine the merits of each without the corresponding demerits in a new method of operating. It consists in making a vertical lateral incision over the front of the kidney through the abdominal wall. The peritoneal cavity being opened, the diseased organ and the opposite one can be explored; and if the surgeon decides to proceed with the operation, he makes a clean vertical cut through the peritoneum over the kidney on the outer side of the colon, and strips up the serous membrane from the front of the kidney. By carefully suturing the cut edges of this visceral peritoneum to the edges of the abdominal wound, the field of operation is completely shut out from the general peritoneal cavity. Before doing this, the surgeon proceeds with the removal of the kidney. The vessels having been secured, the cut edges of the peritoneum are united as described above, and the ureter can be brought out at the lower end of the wound, which is then partially closed, a large drain being left in. The advantages of this method of operating are the facilities it affords for determining the condition of the opposite kidney, abundant room for extracting the kidney, ease in dealing with the pedicle, satisfactory drainage of the wound, which is rendered extra-peritoneal, and the freedom from risk of contaminating the peritoneum by the divided ureter. Terrier records the two cases in which he has practised this operation in the *Revue de Chirurgie* for May. One of them, in which there was hydronephrosis of the organ, was successful; the other, a case of malignant disease, was fatal. This method of operating certainly deserves further trial.

ANTI-VACCINATION.

THE article which we published recently on the instructions to public vaccinators issued by the Local Government Board is the subject of a letter in the *Echo* by Mr. William Tebb, a prominent leader of the anti-vaccination party, who, referring to our statement that "the amount of sickness and death which is prevented by this operation (vaccination) is almost incalculable," proceeds to say: "No evidence is produced to establish the truth of this wonderful salvation, for the very sufficient reason that there is none to produce, as all the available evidence both from England and the Continent points in an opposite direction." The anti-vaccinationists know too well that an assertion such as this appearing in the public press and left uncontradicted must have its effect amongst those persons who would never think of learning the lessons taught by every small-pox hospital, by the Registrar-General, by the Local Government Board, and by the State Departments of other countries. We have no reason to anticipate that any Government would deprive the country of the benefits resulting from the administration

of the Vaccination Acts; but the efficiency with which these Acts can be carried out is largely dependent upon the willingness of the people to protect their children by vaccination against small-pox. Under these circumstances, it becomes a serious question whether greater effort should not be made to combat such false statements as that to which we refer, and to enlighten the public as to the dangers of small-pox, and as to the immunity from this disease which is conferred by vaccination. It is indeed lamentable that a few anti-vaccinationists should be permitted to poison the public mind by assertions absolutely devoid of truth. The press, which publishes the letters of anti-vaccinationists, is not less open to those who are cognisant of the enormous saving of life which is effected by vaccination. There is no class of men who could better undertake this duty of the education of the public than medical officers of health, and no better service could be rendered by these officials than the constant delivery of lectures in their districts, which would thus enable the information, now too much confined to official publications, to be generally known. The Society of Medical Officers of Health are now considering changes in the constitution of their body which will add to its power of usefulness, and we would venture to suggest that the course we have indicated is one which they might readily adopt. They would be able to make clear to the public the absurdity of a story told in the same number of the *Echo*, that an unfortunate baby, who subsequently to vaccination suffered from diphtheria and whooping-cough, did not contract these diseases from its vaccination, and they would thus prevent the growth of an opinion based upon these fallacious statements. We do not doubt that if this method had been earlier adopted, we should have found the death-rates from small-pox much lower than they have hitherto been.

PARALYSIS OF CONVERGENCE IN TABES DORSALIS.

AN interesting case of paralysis of the movement of convergence of the eyes occurring at the commencement of tabes dorsalis, in a man aged thirty-six, has been placed on record by Dr. de Watteville in the *Neurologisches Centralblatt* (No. 10), and the facts of the case are also vouched for by Dr. James Anderson, whose examination corroborated the loss of knee jerk, loss of the light-reflex of the pupil, and the presence of accommodation, lateral and vertical movements of the globes, with perfect action of the eyelids. Loss of this function of converging the eyelids has been recorded as an isolated symptom, and as complicating Basedow's disease. Dr. de Watteville states that he knows of no observation in which this loss of convergence has been chronicled during the early stage of tabes, but he quotes Dr. Gowers' Manual, vol. i., p. 298: "Rarely there is loss of the movement of convergence associated with loss of accommodation, although the internal recti may act in the movement towards one side."

"WAKING NUMBNESS."

THE author of this communication to the *American Journal of the Medical Sciences* (April, 1887) proposes as a convenient designation for the "hitherto undescribed neurosis" the name of "narkophypnia," a suggestion which we trust will not receive general support. There is, he states, nothing but the sensation of numbness in these cases, no paralysis of motion or sensation, no change in temperature of the affected part, the surface is not blanched or mottled, and there is no tenderness on pressure. One case has been under observation six years; the patient, a professional man, aged forty-three, wakes up with a sensation of numbness which may involve both hands, arms, shoulders, thorax, and tongue. The sensation lasts no longer than one minute.

THE GORDON MEMORIAL.

EVERYONE who wishes well to the youth of the country will have learnt with satisfaction that the Gordon Boys' Home has, during its short but useful past, fully justified its claim to a continued existence. In the report submitted last week to the Council of this institution it was shown that the accommodation hitherto provided at Fort Wallington is fully occupied—a sufficient proof that the benefits afforded within its walls have been appreciated. Order, at one time somewhat difficult to establish, is now satisfactorily maintained, and, in spite of a considerable necessary outlay, self-help and economy have materially reduced the amount of working expenses, while the assets of the Home derived from funded property have largely increased. Just at this time, however, a large additional expenditure will be required for building purposes in connexion with the formation of the permanent establishment between Bagshot and Woking. This work has already been begun, and it is hoped that by next winter 160 boys will be in occupation of the new quarters. It is hardly requisite to remind our readers that the means at the disposal of the Council are still limited. They do not suffice to meet the whole cost of this scheme of extension. A greater sum than the available yearly income, indeed, is required to maintain the educational machinery in a thoroughly efficient state. The public are therefore invited to contribute in aid of this very deserving project. We cannot do better than advise them to accept the offer, and thus to prove at once their sense of what is really most practical in philanthropy, and their esteem for the memory of one who freely and most worthily spent his all and himself in their service. We note with particular interest that the new arrangements include the erection of a small detached infirmary, and for this purpose £1000 will be required. No part of the contemplated changes is more clearly desirable or even essential to the success of the scheme as a whole. No school of this kind can possibly be complete without its hospital, and the fact that this will be a separate building in the new Home is an additional guarantee that the management of affairs is in careful hands.

A POULTRY DEALER'S DEN IN THE EAST-END.

THE sanitary inspector of the Whitechapel District Board of Works has discovered a house in Spitalfields where the floor, bed, tables, and chairs were bespattered with filth due to the killing, drawing, and plucking of ducks and fowls. In the yard, in cages that did not seem to have been cleaned, there were a number of live poultry. The occupier of the house was a foreign Jew who deals in poultry. The odour of the rooms is described as most sickening, and the drainage arrangements as in a truly horrible state. Other rooms in this house were sublet and greatly overcrowded. Poverty, overcrowding, and defective drainage are bad enough of themselves, and too often characterise the houses where foreign Jews crowd together in the East-end of London. In this case, however, we have an additional grievance; and, at first sight, it seems difficult to explain how, under such unpropitious circumstances, a trade in poultry can possibly be established. Why should purchasers patronise this overcrowded and obnoxious private house instead of going to the market or to a clean shop? A ready explanation, however, can be given. It is a question of "Kosher" meat. The Jew must not eat poultry killed in the ordinary manner, and this poultry dealer buys live stock only, which he despatches in accordance with the rules laid down by the rabbi, and thus is able to trade with the Jewish community. The grievance may therefore be referred to the Jewish Board of Guardians and the Sanitary Committee they appointed shortly after the revelations we published concerning the sanitary condition

of the sweaters' dens in the East-end of London. The Jewish laws affecting the slaughtering of animals for human food were conceived with a view to the preservation of health. The poultry dealer in question may have observed the letter of these laws; but surely the condition of his house as described by the sanitary inspector is not in keeping with the spirit of the law. This obvious fact will commend itself to the more educated section of the Jewish community; and, for the health and credit of their race, measures will doubtless be taken by the Jews themselves to abate the nuisance.

THE FIELD OF VISION IN NEUROSES AND DURING THE MENSTRUAL PERIOD.

DR. L. FINKELSTEIN has drawn attention in a recent work to the effect of various neuroses and of menstruation upon the functional activity of the organs of sense, especially of the eye. Thus he found, from a large number of observations taken in Professor Merzheievski's clinic for nervous diseases in St. Petersburg, that in epilepsy, hysteria, neurasthenia, delirium tremens, and during menstruation the field of vision is perceptibly diminished in a concentric manner. In epilepsy the internal radius of the field is usually most affected. This diminution in the field of vision commences before the fit, simultaneously with the premonitory giddiness, headache, &c. The greatest diminution is, however, observed immediately after the fit; by the next day the field has always resumed its normal extent, no permanent effect having been detected in any of the cases examined. The field of vision for colours presented various anomalies, the diminution being most marked in the case of green, less for yellow and red, and least of all for blue. With regard to menstruation, it was found that the field begins to diminish from one to three days before the period, reaching its extreme limit on the third or fourth day of the flux, and returning to the normal about the seventh day. It varies in degree directly with the general condition of the woman and with the amount of blood lost. Here the diminution of the field of vision for different colours does not appear to vary, as in the case of epilepsy.

CHARGES AGAINST MEDICAL MEN.

IT is to be hoped that the almost uniform unsuccess of actions brought against medical men charged with offences against women, said to be committed in the course of the discharge of their professional duties, will lead women to be more careful in bringing such charges, and hysterical moralists to be more chary of stimulating women to fancy themselves injured. We would not say a word calculated to diminish carefulness on the part of medical men. Rather would we advise double caution in their professional relations with women. For example, we think it highly indiscreet in a medical man to administer an anæsthetic to a female patient without the presence of a third party. Also we think it very inconvenient and unfit that a medical man should have a habit of seeing patients in his bedroom. Such indiscretions perhaps show only the confidence of medical men in their own uprightness; but they are not to be approved for all that. Still, when all care is taken, our profession, from its very nature, will be exceptionally exposed to such attacks and actions as those under notice. The presence of third parties is a desirable condition of all consultations, but it is manifestly often impracticable, and the main stay of the profession must be on its own character and the delicacy of its own sense of honour and purity. Fortunately, there is a widespread confidence in the profession—a belief that it realises its responsibilities and appreciates the obligations imposed on it by the very interests with which it is trusted. This confidence is shown not only by the verdicts of juries, but by the observations of judges, and by the generous and respectful tone of articles in our lay contemporaries called forth by recent cases. We have been very much struck with this tribute to the profession, which may well lead every medical man to be doubly careful not to do anything that will lower the high standard of professional honour and morals, and it may well lead the medical bodies to deal boldly in expelling those who discredit their diplomas. The rarity of the necessity for such action on the part of the medical bodies is the best proof that the profession is still sound at heart and true to its great ethical traditions, which embrace "whatsoever things are true, whatsoever things are pure and of good report."

LONDON WATER SUPPLY.

A CONTEMPORARY, commenting on the machinery for the prevention of injury to health from London water supply, observes that, now there are half a dozen chemists and a Government water examiner engaged in this duty, if anything goes wrong the fact is not likely to escape notice. We have no doubt these gentlemen will do all in their power, but the staff is deficient in the one officer who could render most signal services to London; there is ample need for the employment of an engineer and of analytical chemists, but the subject which requires the most serious study is the effect of water upon the health of its drinkers. A medical man, skilled in sanitary science, is alone competent to undertake this duty, and Londoners should not rest satisfied until their interests are protected by the strengthening of the staff in this direction. The risks to London from the present methods of supply deserve to be immediately investigated, and every fact concerning them known; it will be little satisfaction to water drinkers if this should only be undertaken after a repetition of the calamitous experience of the year 1866.

COVERING WOUNDS WITH PLASTER.

AT an inquest held in the Southwark Coroner's Court last Friday a point was brought out which is of some importance as bearing on the treatment of recent wounds. A schoolboy running out of the school gates fell and cut his forehead. The wound was strapped with plaster, and everything appears to have gone well for four days. Then shivering came on, and was followed by drowsiness deepening into insensibility, and death resulted two days later. After a post-mortem examination, it was decided that the fatal issue was due to blood-poisoning brought on by neglecting to cleanse and dress the wound, the plaster never having been removed from the time of its application. In commenting on cases of this kind one naturally allows somewhat for the possible effects of shock occasioned by the primary injury, which, without amounting to any gross lesion, might yet materially influence the final result. Be this as it may, however, enough has been shown in evidence to enable the coroner to assign to the death in question a more direct connexion with the wound itself. The practice of plastering over recent cuts is very usual; it is also one which in numerous instances has proved injurious. Apart from any question of blood-poisoning, indeed, the mere tension of retained discharges is an inevitable source of mischief where this custom is adhered to. The simple rule in surgery which provides for the free escape of pus where such is likely to form is one of which we need not remind any qualified practitioner. Accidents due to neglect of this rule are chiefly liable to occur when a wound has been treated either by the injured person himself or by a practising chemist. In such cases plaster is the first resource, and is apt to be used rather well than wisely.

NEALE'S MEDICAL DIGEST.

THE second edition of this work, the first edition of which formed the seventy-fifth volume of the New Sydenham Society's publications in 1877, affords a means of ready information regarding such discoveries, new doctrines, and different methods of treatment in each department of medical science as are likely to be of interest to the practitioner. An appendix to the work has now been published, including the years 1882-3-4-5 and the early part of 1886. Originally intended for the daily and hourly use of the busy practitioner, there is hardly a case that one is called upon to attend in which valuable suggestions cannot be obtained by a simple glance at the pages of the Digest. We have already noticed Dr. Neale's work, but are induced again to call our readers' attention to the work for this reason: weekly, nay daily, we receive from correspondents queries, the answers to 99 per cent. of which are contained in this volume. All of us are conscious of valuable time having been lost in searching back numbers and wrong volumes of periodicals for what, after all, will most probably be missed, and to obviate such loss we can recommend to our readers no better method than reference to the Digest and its first Appendix.

SEASONAL RELATIONS OF CHOREA AND RHEUMATISM.

IN his paper on a partial study of the seasonal relations of chorea and rheumatism in the *Medical News* of Nov. 13th, 1886, Dr. Morris J. Lewis finds that while the chorea tracing shows a strong tendency to keep pace month by month with the irregularities in the storm tracing, that of rheumatism, while also strongly resembling the latter, may be seen to be exactly one month later, looking as if the effect of the meteorological changes was immediate in the case of chorea—as it is now acknowledged to be in some varieties of neuralgia—and preparatory only in cases of rheumatism. "From the close relationship known to exist between these two diseases one might be led to suppose that the rheumatism tracing would precede, or at least accompany, that of chorea, instead of following it, as this study seems to show."

ADULTERATION OF OIL AND LARD.

OLIVE OIL is adulterated extensively, and lard is also adulterated. These are among the latest discoveries of the daily papers, and for a day or two they have attracted some feeble indignation in the public mind. "How fraudulent—how disgraceful!" say a few, and then pass on to some other novelty. Of course, oil and lard are adulterated. No one who knows anything of the trades doubts it. Dishonest vendors are making profits freely by their dishonesty, but nothing noxious is sold to the public, and as for the fraud, who cares? Certainly not the Government, who are too busy to think of such things, and certainly not the public, who are too apathetic to care about anything that does not come before them with a flourish of trumpets. The British consul at Leghorn has recently made some strong remarks on the barefaced frauds now openly perpetrated in Tuscany and England. Not only is olive oil freely adulterated with the cheaper oil of cotton seed, but the well-known flasks and cases are now sent empty to London to be filled with cotton seed oil and sold in England as olive oil of fine quality. It may well be asked, Is there no possible remedy for such audacious swindling? Of course there is; the remedy is simple enough. The adulterations of olive oil can easily be detected, and fraudulent vendors might easily be punished if it were not for the absurd difficulties which are engendered by our English law. Give us a more stringent Adulteration Act, which shall not only confer greater power upon local authorities, but compel them to exercise it, and such frauds would soon become matters of history. At present, however, there seems little chance of such an upheaval of commercial morality.

LEUCOCYTOSIS AND NEW GROWTHS.

ALMOST any sudden or rapid change in the organism appears to be attended with an increase in the white blood corpuscles. In fevers, inflammations, and especially suppurations, a leucocytosis may always be detected. A careful paper on this subject was communicated to the Royal Medical and Chirurgical Society by Mr. T. P. Gostling two years ago. Hayem has recently read a paper on the leucocytosis accompanying the development of neoplasms. A cubic millimetre of blood should yield normally 6000 white blood corpuscles, but the numerical fluctuations are greater for white than for red blood corpuscles. Hayem, assisted by M. Alexandre, draws the following conclusions:—Scirrhus and encephaloid cancers are accompanied by a slight increase in the number of white blood corpuscles. The leucocytosis is much more marked with osteo-sarcoma and lympho-sarcoma. Epithelioma has the least influence in inducing an increase in the white corpuscles. Hayem believes that the leucocytosis may prove of diagnostic service, and mentions a case of doubtful epithelioma of the foot in which M. Alexandre counted 14,000 white globules per cubic millimetre; it was thought during the life of the patient, from this circumstance and from the absence of inflammatory complications, that the disease might be cancerous. The case terminated fatally after operation, and the necropsy revealed several visceral neoplasms of encephaloid structure

ANOTHER DEATH ON A TRICYCLE.

CLOSELY following the death of Prof. Hack of Freiburg on a tricycle, a well-known inhabitant and parochial official of Plumstead has met with a similar end. On the Queen's birthday he rode out into the country, and after having ascended a hill near Sidcup, and while going steadily along a level road, smoking according to his usual practice, he was seen to fall from the machine. The bystanders appear, unfortunately, to have attempted to raise him into a sitting posture against the bank, and he died in a few minutes. According to the published report of the inquest, the medical evidence was to the effect that "all the organs of life were healthy, and that death had been the result of syncope produced by over-exertion after a hearty meal." The deceased was fifty-five years of age. Healthful as cycling is for those who are young and strong, with an unimpaired condition of the circulatory organs, it becomes a dangerously severe exercise for persons who, besides being somewhat advanced in life, have any cardiac or arterial mischief, and if indulged in to the point of riding up hills immediately after a heavy meal fatal consequences may very easily ensue.

THE LATEST CURE FOR CONSUMPTION.

THE recent observations of Dr. Kolischer upon a new method of treating tuberculous disease of joints, which were described by our Vienna correspondent last week, appear to have excited considerable attention. The method, based on the fact that tubercle deposits do sometimes undergo spontaneous "cure" by calcification and fibroid changes, was an endeavour to excite such retrogressive change artificially. The results obtained in the few cases at present thoroughly treated were certainly striking, and were declared by Professor Albert to surpass any other plan of treatment yet in vogue. It is now said that Dr. Kolischer contemplates applying the same method to the treatment of visceral tubercle, and once more the world is agitated by the

alleged discovery of a "cure for consumption." We would counsel a little patience before accepting even the possibility of being able to artificially arrest the progress of pulmonary phthisis by the administration of acid phosphate of lime or any other salt. At the same time, we would by no means discountenance a fair trial of any plan which, as in this case, is based on rational grounds. Perhaps between the varied efforts to discover germicidal agents on the one hand, and drugs to render the tubercular neoplasm obsolete on the other, we may one day arrive at some panacea. There is not much, however, in the recent history of the treatment of phthisis to render us very sanguine of such a result being attained.

CLINICAL SOCIETY.

AT the last meeting of the Clinical Society a vote of thanks to the Committee for its report on the connexion of joint disease with locomotor ataxy was proposed by Dr. J. G. Glover, seconded by Dr. Ormerod, and agreed to with acclamation. The President said that the report was a most valuable one, and would reflect great credit on the whole Society. The names of Sir James Paget (chairman of the committee) and of Mr. Bilton Pollard (the hon. sec., on whom it is understood a considerable amount of work fell) were specially mentioned in the vote of thanks. Mr. Bilton Pollard thanked the Society on behalf of the committee, and said that the report comprised the results of observation of a large series of cases of joint disease in locomotor ataxy and of ordinary osteo-arthritis, and, so far as the cases allowed, he thought the report went far in the direction of settling points raised in the debate.

VACCINATION IN NATAL.

THE precautions necessary to be observed against small-pox epidemics appear to be sadly neglected in Natal. At the last half-yearly meeting of the Vaccine Board it was stated that forty-eight births had been registered in the Newcastle division during the latter half of last year, and, as far as could be ascertained, not one of these children had been vaccinated.

A CASE OF HYDROPHOBIA.

A CASE of hydrophobia was admitted into St. Thomas's Hospital on May 16th. The boy, aged six, was bitten by a dog over the left eye two years ago; the wound was not treated in any way; he was quite well until the evening of the 15th ult., when he was observed to be rolling on the floor, and soon refused food and drink. He was admitted on the evening of the 16th, the symptoms then being a peculiar jerky inspiration with a condition of great terror and excitement. He soon developed well-marked symptoms, having general convulsions on attempting to drink, and constantly ejecting saliva from his mouth. He was quiet and sensible between the paroxysms, complaining of toothache on the left side. He died on the evening of the 17th from cardiac and respiratory paralysis.

NO MEDICAL EVIDENCE.

AN inquest was held on May 24th by Mr. William Carter, at York-street, Lambeth, touching the death of Sarah Clara Watson, aged fifty-one years. From the evidence, it appears that the deceased had been addicted to habits of intemperance for twenty years. On the day of her death she called up her son, and complained of feeling ill. A glass of wine was given to her, and immediately afterwards she fell prone on to her bed, and appeared to sink into "a sound sleep." Two hours later it was discovered she was dead. No medical man was sent for, nor was any medical evidence called for at the inquest. The deceased appears to have manifested some delusions shortly before her death, and it is not at all improbable that she had delirium tremens, and that she died from sudden failure of the heart's action—an issue not very uncommon in that affection. Moreover, long indulgence in alcohol is calculated to produce fatty degeneration of the heart's substance, and this may have conduced to the fatal event. At the same time, we cannot but think that a medical man should have been summoned when the deceased was found to be dead, or apparently dead, and that the case was one in which a post-mortem examination should have been made. In every case of sudden death, where the cause is not obvious, the jury should have something more than probabilities to guide them.

NEPHRO-LITHOTOMY IN AUSTRALIA.

DR. W. GARDNER, surgeon to the Adelaide Hospital, reports a successful case of nephro-lithotomy, which is of special interest as the first case in which this operation has been performed in Australia. The patient was a man twenty-three years of age, who dated his troubles from a fall, which was immediately followed by hæmaturia. For three years he suffered from pain in the left loin and testicle, hæmaturia, and frequent micturition. There was marked tenderness of the left kidney. Dr. Gardner cut down on to this organ from the loin, found a stone in it, and removed it. The calculus was composed of oxalate of lime. The patient made a good recovery. It is satisfactory to find that the value of this operation is appreciated in our far-off colonies, and that they are supplied with surgeons so alive to the advances made in Europe, and so well qualified to give their patients the benefit of them.

INFANTILE DIARRHŒA.

THE latest recommendation for the treatment of the "green diarrhœa" of infants is that of M. Hayem, who has tried with much success the hydrochloric and lactic acids, the latter being preferred. A teaspoonful of a 2 per cent. solution of lactic acid is given after each stool, as much as from forty to sixty centigrammes a day being taken by the infant. M. Lesage has investigated the stools and has discovered a microbe, which will probably receive more attention. The activity of this microbe is diminished by acids, hence the explanation of the value of the above treatment.

MR. LUND, F.R.C.S.

WE regret to hear that Mr. Lund, whilst engaged last Saturday in his duty as an examiner in the Final Fellowship, was seized with a slight attack of an apoplectic nature. We are very glad, however, to be able to state that he is now so far recovered as to be able to leave his bed, and will after a few days' rest probably be able to resume his professional duties.

DEATHS OF EMINENT FOREIGN MEDICAL AND SCIENTIFIC MEN.

THE deaths of the following foreign medical and scientific men are announced:—Dr. Emil Huber, Extraordinary Professor and First Assistant in the Leipsig Pathological Institute.—Dr. Ferdinand Hauska, Emeritus Professor of Medical Jurisprudence in Vienna.—Professor Hamernik, of Prague, in his seventy-seventh year.—Dr. Jewell, Professor of Neurology and Mental Diseases at the Chicago Medical College.—Dr. Alexander Ecker, Professor of Anatomy in Freiburg.—Dr. François Vleminckx, secretary of the Brussels Medical Federation.

FOREIGN UNIVERSITY INTELLIGENCE.

Berlin.—Professor Senator has succeeded Professor Henoch in the charge of the clinic for children's disease, Professor Henoch being obliged to retire on account of ill health.

Buda-Pesth.—Drs. Jendrassik and Moravcsik have qualified as *Privatdocenten;* also Dr. Pertik, Prosector of the new City Hospital.

Leipsig.—Dr. Winkler, of the Freiburg Bergakademie, has been appointed Professor of Chemistry, with the charge of the physico-chemical laboratory, in succession to Professor G. Wiedemann.

MESSRS. LONGMANS AND CO. announce as almost ready for publication the following amongst other new books and new editions:—A Text-book of Elementary Biology, by R. J. Harvey Gibson, M.A., F.R.S.E., Demonstrator of Biology in University College, Liverpool; Modern Theories of Chemistry, by Professor Lothar Meyer, translated from the fifth German edition by Messrs. Bedson and Williams; a new edition of Huth's Marriage of Near Kin; Electricity for Public Schools and Colleges, by W. Larden, M.A.; and Elements of Physiological Psychology, by George T. Ladd, Professor of Philosophy in Yale University.

IT is satisfactory to learn that the Home Secretary has advised Her Majesty to commute the sentence recently passed upon the two prisoners at Warwick Assizes for having caused the death of a young woman by procuring abortion. As we remarked last week, heinous as is the offence of criminal abortion, there are yet certain features in connexion with this case which seem to show that justice will be satisfied with a less penalty than the highest the law can inflict.

ON Wednesday, at the French Academy of Medicine, Sir T. Spencer Wells was elected Corresponding Foreign Member, "*à la presque unanimité des suffrages*"; and last month he received the diploma of Honorary Fellow of the German Society of Surgery, conferred at their sixteenth Congress.

WE are requested to inform subscribers to the Jacob testimonial that the presentation of the address and purse of 500 sovereigns will be made at 5 P.M. on Monday, June 6th, at the Royal College of Surgeons, Dublin.

MR. A. MARMADUKE SHEILD, M.B., B.S. Cantab., F.R.C.S. Eng., assistant surgeon to Westminster Hospital, has been elected an assistant surgeon to Charing-cross Hospital.

THE ninth annual congress of the American Laryngological Association was held at New York on the 26th ult. and two following days.

UNIVERSITY COLLEGE, LONDON.

THE distribution of prizes by the Faculty of Medicine of the London University College took place on Wednesday, when Sir George Young, Bart., presided. There was a large attendance of professors and students. After the reading of the report by the Dean of the Faculty and the presentation of the prizes,

The CHAIRMAN addressed the students. He congratulated the recipients of the prizes, and after referring to the past work of the College and the loss sustained by the death of Dr. Wilson Fox, he alluded to the establishment of the Victoria University, its general objects, and its effects on the London University College. He pointed to the fact that a number of medical students in London were in the habit of going to the provinces to qualify by residence at some other school for the attainment of the degree which the authorities of the school had power to give. Admitting that there were teachers elsewhere as eminent as those in London, why should he hesitate to say, when it was universally acknowledged, that there was no medical school in the kingdom which could claim a higher tradition of successful teaching than their own, that the general hospitals of London with their eleven medical schools afforded a field for study which it was ridiculous should be deserted for other fields under the stress of artificial regulations? Not only were medical schools dependent upon hospitals, but hospitals were dependent upon them. Each school had to provide not merely the clinical teaching which the hospital wards supplied, but scientific instruction of a multifarious and costly character. When a school was a constituent of a general college the instruction was ready to hand, but elsewhere it was too often improperly provided. Most of the lesser schools had lately acknowledged their insufficiency, and had entered into an arrangement with the Government School of Science at South Kensington to get that part of their work done for them. To that arrangement the Council of the College took exception on account of its exclusive character. A remedy for the existing evil was needed which should put an end, not to wholesome emulations, but to the mischief which proceeded from their excess, which would enable other schools, without fear of losing ground, to permit their students to come to the London University College for scientific instruction, and which should bring together the teachers and administrators of the schools to concert, on equal terms, on a common platform, with the University, means for the improvement of medical education. Considerations of that nature had led to the movement for a Teaching University in and for London, which had now been brought to a practical stage of definite proposals and a formal programme. They asked that the same privilege which had been conceded to the country colleges through the Victoria University should be conceded to them. They wanted a degree giving authority, in which their administrators and teachers should have their due share of influence. They wanted a new institution—a federation of the University colleges and medical schools in the London district—whereby measures might be arranged, in concert, for the promotion of university education. They could not go to Manchester, or so far give up their position and history as to apply for admittance to the offspring of their offspring. To do so would be to accept a position in a university of an imperfect type, when the perfect type of a localised university was open to them. If the population of this vast metropolis was not sufficient to support a university, what population was? The last report of the Senate Committee of the London University had been carefully considered by the College, but its proposals did not amount to the foundation of anything analogous to a Teaching University for London. They were limited to the admission on the Senate of eight representatives of bodies called Faculties, which were again to be composed of the representatives of the teaching institutions throughout England sending up students to the University examinations. There was also a provision for Boards of Studies, and there was to be an addition to the preamble including among the purposes of the University "the promotion of regular and liberal education throughout Her Majesty's dominions, and especially in the metropolis and its neighbourhood." There was, finally, a proposition that the University was to be at liberty to found professorships and lectureships provided they were not of a kind likely to compete with the University College. The proposals, however, were of a very meagre character: nothing was done for the organisation of university education in London. The Boards of Studies, the Faculties, and the new members of Council did not belong to London, but to England at large, and they could not meet the evils that had been pointed out. They tended to interfere with the position of impartiality which the University was bound to maintain. By mixing up the system of an Examining University with the system of a Teaching University they ran the risk of spoiling the work the University was doing, and they were quite certain not to do well the work that was waiting to be done. The real work of a Teaching University was not merely to provide for, but to commend to its students, the best methods of study under the best teachers; in the Examining Univer-

sity the degree was only the mark of attainment. The two systems were not compatible. But if mutually destructive when blended in one institution, there was room for them both. There was plenty of room for an Examining University in the British Empire. Even though a certain proportion of its candidates from London institutions were withdrawn, there would still be plenty of candidates for its degrees, and plenty of honour attaching to them. But why should institutions like the London University College be for ever debarred from the right to confer, under proper guarantees, the honour of a public degree? They asked that a charter to confer degrees upon all persons who had undergone a regular course of study in a college or medical school of the University, and had passed the required examinations, should be granted to a suitable governing body upon which the governing bodies of University College, of King's College, and of the teaching staff, not merely of those Colleges, but of other medical schools, should be represented. To this end they sought an alliance with the Royal Colleges of Physicians and Surgeons, thus offering guarantees to other medical schools that their interests would be respected. It had been objected that the degrees of the London University having been kept at a high standard, the degrees of the new University would not be kept as high. He did not deny that it was one of their objects that degrees should be more easily obtained by London medical students. There was always some work thrown away in preparing for the best of examinations, and in preparing for an examination against which great objections were urged, which was arranged independently of the teachers who prepared for it, the amount of friction and wasted work was considerable. Assuming that a London degree represented higher attainment than an Edinburgh or a Cambridge degree, that was an excellent thing for the University and for those who attained its degrees, but it was a bad thing for the much greater number who gave up all hopes of a degree, but who might have been stimulated to meritorious exertions for a prize which was within the reach of effort. It was a still worse thing for youths who ran away to Newcastle, because they foresaw that in country practice they would be at a disadvantage beside the Newcastle men. The next objection was that the professors wanted to "brand their own herrings," that the defects of their teaching should be concealed by the Government stamp, which was placed in their own power to confer. That accusation was a mistake. The University system to which more than any other the accusation applied was that of the University of London. Again, it had been urged that the establishment of a new University with power to confer degrees with a licence to practise was objectionable as increasing the number of bodies conferring such licences. The remedy would be easy if a cordial alliance could be established with the Royal Colleges. There would be no interference with their prerogative and no addition to the number of licensing bodies. There was at present a movement on foot at the College of Physicians for a single Faculty university in London, or an institution in the nature of a university to confer medical degrees alone. That movement appeared to the London University College to be part of its movement. Regarding it as a separate movement the College could not look upon it altogether with approval, as it would be fatal to its medical school; but if the movement of the Colleges of Physicians and Surgeons could be brought into line with that of the University College, then, indeed, they would have obtained a very large part of what they sought. No doubt there were great difficulties to be encountered. Some of their number, including their President, and others who had held high office, had thought it their duty to withdraw from the Council of the College. They had, however, encouraging assurances from influential quarters of sympathy with the movement, and they would, no doubt, soon be in a position to fill up satisfactorily their depleted ranks. Those who remained were not discouraged; they were now unanimous amongst themselves; they had the unanimous support of the professors; they had the unanimous voice of King's College, once their rival but now their cordial ally; they had friends in the press, in every medical school in London, and every university in England. They believed in the future capabilities of the institution, and they desired to make it greater than it was at present, more splendid, more efficient, and in that aim they expected to succeed, because they were not labouring only for their own aggrandisement, but towards the foundation of a university which would be of incalculable benefit to the cause of education in the mighty metropolis in which they lived. (Loud applause.)

On the motion of Mr. ERICHSEN, a vote of thanks was passed to Sir G. Young for his address.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

WE have received from the Secretary of the College for publication the subjoined abstract of the petition to the Queen for a Supplementary Charter. Copies may, we understand, be obtained on application by Fellows and Members of the College.

The following are the purposes for which the application is about to be made:—

1. To enable the College to hold "lands, tenements, rents, and hereditaments" of an annual value not exceeding £20,000, instead of £2000 as by present Charter.

2. To enable the Council to determine by rules and regulations, instead of, as at present, by bye-laws, the conditions of admission to the Fellowship by examination; and to determine by bye-law, instead of by Charter, the fees payable for such Fellowship.

3. To empower the Council to elect to the Fellowship Members of twenty years' standing, not exceeding ten (instead of two) in each year, on the payment of the same fee as required for the Fellowship by examination.

4. To authorise the election by the Council of any number of persons, not exceeding two in each year, whether a Member or Members of the College or not, having, in the opinion of the Council, to be ascertained and expressed in such manner as the Council may from time to time think fit and direct, rendered distinguished service in the advancement of surgery or the sciences allied thereto, such persons to be and be called Honorary Fellows. Such Honorary Fellows not to pay any fee, and to be ineligible to vote for the election of members of the Council.

5. To provide that Fellows may vote in the election of the Council either in person or by voting papers, such papers to be signed, authenticated, and delivered in such manner as the Council shall from time to time think fit and direct. No election of members of Council to be valid unless there shall be present at the meeting for the purpose of such election such number of Fellows as the Council may from time to time think fit and direct.

6. To render Fellows of ten (instead of fourteen) years' standing eligible for election as members of Council, and to abolish the restriction in regard to their practising as apothecaries.

7. To simplify the mode of nomination of Fellows, candidates for election to the Council, by requiring in each case only one nomination paper to be signed by three Fellows.

8. To dissolve the Midwifery Board.

9. To enable the Council to increase the number of members of the Board of Examiners in Dental Surgery, and to require that those members of the Board described as "persons skilled in Dental Surgery," who shall in future be elected, shall be persons registered under the Dentists Act of 1878.

May 23rd, 1887. EDWARD THIMMER, Secretary.

HEALTH OF ARMY HORSES.

THE annual statistical and general report of the principal veterinary surgeon of the army, for the year 1886 has just been issued, and is of a very satisfactory character. The mean strength of the army horses at home was 12,393; the admissions on the sick list during the year were in the proportion of 628 per 1000; the deaths from all causes were 18·8, of which 12·5 were the result of disease and 6·3 were destroyed for various causes. The proportion cast and sold amounted to 87·5, and the constantly non-effective from disease and injury to 38·0 per 1000 of the strength. Compared with the preceding year's results, the admissions were slightly higher, the deaths and constantly non-effective were identical, and there was a slight decrease in the number cast. The Royal Engineers furnished the highest proportion of cases, amount-

ing to 825, and the Life Guards the lowest, being only 428 per 1000. The highest death-rate (25·3) was in the Heavy Cavalry, and the lowest (14·4) in the Field Artillery. The increase in the admissions has been chiefly from diseases and injuries of the locomotive apparatus, particularly contusions, sprains, and diseases and injuries of the feet; there has also been an increase in diseases of the digestive apparatus, especially colic, and in strangles and epizootic fever. Only one case of glanders occurred; it was in a remount of the 13th Hussars at Colchester, which had just joined from Ireland, where, it is believed, the disease was contracted. The 2nd Life Guards in Regent's-park Barracks had 65 cases of epizootic fever, being in the ratio of 247 per 1000 of the strength, and nearly half of the admissions from this cause in the whole force. The only other stations at which it prevailed to any extent were Canterbury and Aldershot, which respectively had 20 and 45 cases, or 53·7 and 21·9 per 1000 of strength. Dr. Fleming does not assign any reason for this outbreak in the 2nd Life Guards, but he remarks: "It will be noted that the Regent's-park Barracks, London, continues to be by far the unhealthiest of all the stations for mounted corps in the United Kingdom, the average sickness from zymotic diseases being 24·71 per cent., the next highest being Canterbury, with 5·37 per cent., and the next Aldershot, with 2·19 per cent." Previous reports, however, do not quite bear out this statement about the Regent's-park Barracks, and it is noteworthy that in every year in which they have been recorded as furnishing such cases they have been occupied by the 2nd Life Guards. The immunity of the 1st and liability of the 2nd Life Guards to these diseases is a subject worthy of investigation. A case of rabies occurred in a horse of the 1st Life Guards three months after he had been bitten at Wormwood Scrubbs, although cauterisation of the wound had been immediately resorted to. The highest annual ratio of admissions occurred among the four-year-olds, and the deaths among them were twice as high as at any age up to seventeen—results in accordance with those of previous years.

The proportion of horses cast has been lower than in any of the preceding four years, but their average service has also been lower, having been only seven years and seven months, while in previous years it has usually been a little over nine years. Nearly one-third were cast for "old age." The average price received for them was £10 0s. 9d., which, although a trifle higher than in 1885, was considerably under the prices of preceding years.

In addition to the information respecting the horses in the United Kingdom, the report contains, for the first time, returns of the horses, mules, and camels in charge of the veterinary officers in Egypt and in Natal. The results for the animals in Egypt are shown in the following summary:

—	Average strength.	Ratio per 1000 of strength.			
		Admitted.	Died.	Destroyed.	Total loss.
Horses ...	1191	822	18·5	24·3	42·8
Mules... ...	948	340	9·5	9·5	19·0
Camels ...	615	1691	297·5	42·3	339·8

The admissions of horses were not excessive, considering the circumstances under which they were employed; two-thirds of the cases were of injuries and diseases of the locomotory apparatus and surgical diseases and accidents. Digestive diseases, chiefly colic, were next in frequency, and then general diseases, of which more than half were returned under the heads of anæmia and asthenia. The most fatal diseases were those of the digestive apparatus, causing eleven deaths, of which four were from colic and four from enteritis. The colic "was, in many instances, due to the horses eating sand, usually with their food." There were only nine cases of glanders, which were, of course, at once destroyed. Considering the great prevalence of this disease in Egypt, the army horses appear to have been very fortunate.

The mules furnished a very low ratio of cases and of deaths. The diseases from which they suffered were much the same as those of the horses, but they had only two cases of glanders.

The history of the army camels, as shown by these returns, is a very melancholy one. The proportion of cases and of deaths was extremely high. Of the former, two-thirds were cases of sore back from the saddles, and one-fifth was returned as asthenia and exhaustion. Surely there must have been gross neglect somewhere to permit of such results. Of 209 camels which died or were destroyed, 178 are accounted for under the head of asthenia and exhaustion. On this disgraceful state of matters Dr. Fleming prudently refrains from comment.

The strength of animals employed by Government in Natal is stated at 732 horses and mules, but the numbers of each are not given separately. The cases among them amounted to 759, and the total mortality to 142·0 per 1000 of the strength. Of the ninety-one animals which died, sixty-one were returned under the head of anthrax, and seven of intestinal calculus caused by the horses eating sand. Of "anthrax" Dr. Fleming says that "in some parts of the most fertile portion of the Cape and Natal colonies it is impossible to keep horses during the summer season, nearly all perishing from this plague." Of seventy-one army horses and mules attacked during the year under review, only ten recovered. The Government has sent out a veterinary officer, who has gone through a special course of training, to investigate the nature of the disease "and to attempt its suppression by the adoption of the method of protective inoculation with attenuated or modified virus, introduced by Pasteur and others so successfully in the case of European anthrax." We shall look forward with much interest to the result of these experiments.

In addition to the information on the subject of the health of the army animals at home and abroad, the report gives an interesting account of the good work going on in the Army Veterinary School at Aldershot. The instruction given in it is not confined to the veterinary officers, but is open to any officers of the garrison who may choose to avail themselves of it. A considerable number have taken advantage of it, and there can be no doubt that the knowledge thus acquired may prove most useful in a campaign and in the colonies. The school is also turned to account in training a body of farriers to act as veterinary assistants or subordinates—a system which has already been found to work advantageously on service in Egypt and South Africa. Dr. Fleming has given some details of his proposed farriery reorganisation, which appears calculated to diminish the labour and increase the efficiency of the department; and also a short but interesting article on winter shoeing, which we recommend to the attention of all who require to use their horses in winter, whatever the weather may be. The careful manner in which the report has been drawn up, and the practical character of the suggestions it contains, are worthy of Dr. Fleming's reputation, and the satisfactory state of health of the army horses reflects credit upon the department over which he presides.

ARMY MEDICAL STAFF DINNER.

THE annual dinner of medical officers of this department was held at the Holborn Restaurant on June 1st, Sir Thomas Crawford, K.C.B., in the chair. The following officers and guests were present:—*Inspectors- and Surgeons-General:* Lawson, Balfour, Gordon, C.B., Ker Innes, C.B., Sir T. Longmore, C.B., Massy, C.B., Manifold, Fraser, Mackinnon, C.B., Irvine, Hendley, C.B., Ekin, C.B., Muschamp, and Fuller. *Deputy Inspectors- and Surgeons-General:* Swettenham, Laing, Fox, Fraser, Reade, C.B., Marston, Roberts, Veale, Watts, Sly, and Don. *Brigade Surgeons:* Ashton, Herbert, Wade, Inkson, Warren, Prescott, Gribbon, Maunsell, Wright, Leask, Mackinnon, Lloyd, Adcock, Tomlinson, Clarke, and Anderson, C.I.E., *Surgeons-Major:* Lane, Churchill, Hensman, Staples, Maunsell, Scott, C.M.G., O'Dwyer, McNalty, Nash, Beattie, Johnston, Macartney, Morgan, McSwiney, Macrobin, Frazer, Roe, Clery, Williamson, Ash, Donovan, Buske, Allin, Miller, Gormley, Scott, and Powell. *Surgeons:* Ligertwood, Fenn, Ryan, Tuthill, Kirkpatrick, Seymour, Clark, Flood, Harwood, MacNeece, Baker, Twiss, Sloggett, Porter, Johnston, Reade, Semple, Carte, Sheldrake, Zimmerman, Bostock, Hale, and Minniece. *Guests;* Sir Charles McGrigor, Bart., Sir J. W. Reid, K.C.B., Sir William Mac Cormac, Inspector-General Dale, Dr. Glover, and Messrs. Pollock, Holt, and Hart.

The health of the Director-General of the Department was proposed in very warm terms by Sir William Mac Cormac. In reply, Sir Thomas Crawford said that he was ambitious

mainly to effect two results—first, to hold high the standard of professional efficiency and character in the army, and, secondly, to approximate more and more the military and the civil branches of the medical profession.

HYDROPHOBIA AND THE PASTEUR INSTITUTE.

ACCORDING to the report of the late Dr. Vulpian, the secretary, the number of persons subjected at the Institute to the Pasteur treatment during the fourteen months from the end of October, 1885, to the end of December, 1886, was in all 2682. Of this number 2164 had been bitten by animals known for certain to have been mad at the time of biting, and the remaining 518 by animals suspected to have been mad. Of the 2164 bitten by animals undoubtedly mad and treated according to Pasteur's method, 29 persons died, representing a proportionate mortality of 1·34 per cent. Of the 518 bitten by animals presumed to be mad, and subjected to Pasteur's treatment, only 2 died—i.e., 0·36 per cent. The statistics of rabies before the discovery and application of the Pasteur method give the proportion of mortality from that disease among the persons affected by it as at lowest 16 per cent. If, then, this percentage be correct, the cases of mortality amongst the 2164 persons in the state described, had they not been treated by the Pasteur method, would have been, not 29, but 346. With respect to the most dangerous cases, the report states that there were 48 persons bitten by mad wolves, 186 persons bitten on head or face by animals known to be mad, and 28 bitten on head or face by animals presumed to be mad. Of the 48 in question 7 died—i.e., a mortality of 14 per cent. The mortality in similar cases before the Pasteur method is ascertained to have been 60 to 80 per cent. Moreover, in three of the 48 persons symptoms of rabies had actually appeared before the application of the treatment, and their deaths may therefore be left out of account, thus reducing the mortality of this class under the Pasteur treatment to 8 per cent., as against 60 per cent. to 80 per cent., without this treatment. Of the 186 above specified, the number of persons who died was 9, or 4·83 per cent., as against 88 per cent. without the Pasteur treatment. That is, out of the 186, 163 would have died but for this treatment, whereas under its employment only 9 died. Lastly, of the 28 above specified, only 1 died—i.e., a mortality of 3·57 per cent. For some months past M. Pasteur has modified his method, and in the most serious cases has applied, not simple, but intensive treatment. And whereas out of the 136 specially serious cases in which the simple treatment was applied 9 died, in 50 specially serious cases in which intensive treatment was applied no mortality whatever is stated to have followed.

BIRMINGHAM MEDICAL BENEVOLENT SOCIETY.

THE sixty-fifth annual general meeting of the Birmingham Medical Benevolent Society was held on May 27th, Dr. James Johnston in the chair, there being a good attendance of members. Dr. Thomas Savage, hon. sec., read the annual report of the directors, which stated that during the past year the Society had accomplished its usual amount of work in a quiet, unostentatious manner. The invested funds at the end of 1886 amounted to £10,978. During the year fifteen annuitants had received grants varying in annual value from £10 to £40. The roll of benefit members contains 272 names, the total receipts during the year reached £615 2*s.* 4*d.*, and grants had been made to the amount of £465. A new annuitant, a member of the Society, had been added to the list, and a grant of £40 a year had been made. The widow of a deceased member had also been made an annuitant. Since the commencement of the present year the widow of a deceased member had died. She was in receipt at the time of her death of £25 a year, and had received a total of £837 10*s.* from the funds of the Society. Her husband had paid as a member of the Society seventeen guineas. Twelve new members had been elected, and six had died. Mr. Alfred P. Evans (West Bromwich) was appointed president; Dr. Charles Warden, president elect; Mr. Arthur Oakes (Birmingham) and Mr. J. Arthur (Henley-in-Arden), vice-presidents; Dr. Marriott (Leamington), Mr. Priestley Smith, and Mr. Wm. Thomas were added to the directorate; Mr. Bartlett and Sir James Sawyer were reappointed treasurers, and Dr. Thomas Savage was re-elected honorary secretary. The members afterwards dined at the Grand Hotel, under the chairmanship of Mr. A. P. Evans.

WILLS OF MEDICAL MEN.

THE will of Surgeon-General William Rutherford, M.D., C.B., honorary physician to the Queen, late of 325, Vauxhall-bridge-road, who died on March 24th last, was proved on April 27th by Mr. Peter Ronaldson and Mr. George Ronaldson, the executors, the value of the personal estate in the United Kingdom amounting to upwards of £49,000. The testator bequeaths £500 to the Dublin Lying-in Hospital, and numerous legacies to relatives and others. The residue of his property he leaves between the children of his late first cousin Thomas Shirreff Rutherford, and three of the children of his late first cousin George Rutherford.

The will and codicil of Dayrell Joseph Thackwell Francis, M.D., F.R.C.P., formerly of Northampton, and late of Wethersell Grange, Cranleigh, were proved on April 26th by Herbert Howard Keeling, Mrs. Marian Howard Francis, the widow, and the Rev. Edward Howard Francis, the son, the executors, the value of the personal estate amounting to over £30,000. The testator, after giving legacies to sons and to his trustees, leaves all his real estate and the residue of his personal estate upon trust for his wife for life or widowhood, and then for his children.

The will of John Jackson, M.D., a retired officer of the East India Company in their Bengal establishment, late of 5, Brunswick-terrace, Brighton, who died on March 31st last, was proved on April 23rd by Mr. Herbert William Fisher and Mr. Charles Nottige Macnamara, the executors, the value of the personal estate amounting to over £15,000. The testator gives all his household furniture and effects and £500 to his wife, £50 to each of his executors, and several legacies to brother and sisters. He also leaves £10,500 upon trust, to pay the income to his wife for life, and, after her death, upon the trusts of the marriage settlements of his three daughters. The residue of his property he bequeaths to his wife absolutely.

Letters of administration of the personal estate of Thomas Allen, M.D., late of 11, Keppel-street, Russell-square, who died on March 21st intestate, were granted on April 28th to Mrs. Emma Allen, the widow and relict, the value of the personal estate amounting to upwards of £14,000.

The will of Mr. George Curme, late of 9, Cornhill, Dorchester, surgeon, who died on January 2nd last, was proved on March 10th by Mr. Decimus Curme and Major-General Joseph Hanwell, the executors, the value of the personal estate amounting to £8500. The testator bequeaths all his household furniture, wines, &c., and under his marriage settlement gives his houses in Cornhill and £3500 consols, to his daughter; his surgical books and instruments and his Ross's microscope, with all the fittings, to his nephew, Mr. Decimus Curme; and legacies to servants. His estate at Whitchurch and the residue of his personal estate he leaves upon trust for his daughter for life, and after her death, subject to certain conditions, to Decimus Curme and his sons.

The following legacies have recently been left to hospitals and other medical institutions:—Mr. George Henry Johnson, late of 10, Addison-crescent, Kensington, £105 each to the Chelsea Hospital for Women, Queen's Elm, Brompton; the Metropolitan Free Hospital, 81, Commercial-street; St. George's Hospital, Hyde-park-corner; the West London Hospital, Hammersmith; St. Mary's Hospital, Paddington; the North London or University College Hospital, Gower-street; and the Middlesex Hospital.—Mr. Robert Cocks, late of Wilby House, Ladbroke-terrace, Notting-hill, £200 to the Gloucester Hospital.—Mr. John Bowie, late of the Beacon, Exmouth: The testator gives and bequeaths all such parts of his personal estate and property as may be lawfully bequeathed for charitable purposes to the treasurer for the time being of the Brompton Hospital for Consumption and Diseases of the Chest.—Mrs. Margaret Round, late of Easthill House, Colchester, £100 to the Colchester Hospital.—Mrs. Maria Newen, of 1, Hyde-park-terrace, £300 each to the

Brompton Hospital for Consumption; St. Mary's Hospital, Paddington; and the Cancer Hospital, Fulham.—Mr. John Marsden, late of Whitebanks, Chesterfield, Derby, £100 to the Chesterfield and North Derbyshire Hospital and Dispensary.—Mr. T. E. Jones, late of Whitefield House, Wilmslow, Chester, and of Manchester, £500 to the Montgomeryshire Infirmary at Newtown; £300 each to the Manchester Southern Hospital, Clifford-street, the Royal Eye Hospital, St. John's-street, Deansgate, Manchester, and the Home for Consumption and Diseases of the Throat, St. John's-street, Deansgate; and £200 to the Manchester Institution for Diseases of the Eye, Byrom-street; the residue of his property he gives to the Manchester Infirmary.—Mrs. Margaret William Tryon Cumberland, of Enham Lodge, Lillington, Warwickshire, £300 each to the North-West London Hospital and the Samaritan Free Hospital, Seymour-street, and £100 each to the Hospital for Women, Soho-square, and the Warneford Hospital, Leamington.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Derby Urban District.—Mr. Iliffe, in his annual report for 1886, draws a comparison between the state of the borough of Derby, as regards its appliances for improving public health and the prevention of disease, in 1877 and the year now reported on. The additions made to the security of the borough have been substantial, and they have, of course, not been made without a corresponding cost. But whereas the death-rate in 1877-81 was 21 per 1000, it has been 18·2 for the period 1882-86; the scarlet fever deaths per 1000 have fallen from 43·2 to 10·5, and the diarrhœa deaths from 37·2 to 32·0. Enteric fever has unfortunately had its downward course checked by the milk epidemic of 1884, a calamity for which it is held that the sanitary circumstances of the borough were not responsible. Unfortunately the experience of 1886 does not quite bear out this view. Derby was one of the districts inspected under the survey instituted by the Local Government Board in view of the cholera prevalence in Europe, and it is gratifying to note that Mr. Iliffe found material advantage from the co-operation of Mr. Spear in the task of improving such conditions as specially called for amendment. These related essentially to sewers, house drains, and midden privies; and, naturally enough, water supplies from local wells in such a place as Derby came under condemnation. Enteric fever was far too common in Derby in 1886, and, after a somewhat exhaustive consideration of the conditions leading to it, the conclusion is arrived at that it was mainly due to the contamination of the air by means of the deposits in midden privies. Under such circumstances any epidemic beginning with milk has its spread favoured. During the year a total of 336 cases of infectious diseases was notified; and the authority made final arrangements for erecting a new infectious hospital in the place of the wooden one heretofore serving almost exclusively for small-pox.

Wavertree Urban District.—Although the death-rate during 1886 was not excessive in Wavertree, having been 16·0 per 1000, yet the list of infectious diseases given by Dr. Harvey shows how much an infectious hospital is needed. Typhoid fever of a bad type occurred; scarlet fever often led to two, three, and four cases in the same house; and eleven cases of diphtheria occurred. Dr. Harvey recommends a small hospital in or near the district. Preferably, it should be in the district. There is too much tendency to profess to make use of hospitals in adjoining districts; whereas, as a matter of fact, the mere existence of the hospital elsewhere than in the district it is intended to serve often tends to prevent its use. Unless Wavertree can find such a hospital close to its own boundaries, it had better build a small one within its proper limits.

Runcorn Rural District.—Dr. Adams tabulates at length the instances of infectious disease occurring in his district, and the action taken with regard to each. An outbreak of typhoid fever at the Overton Grammar School House at one time caused anxiety, and led to a strong condemnation of the prevailing sanitary conditions. These were, however, fully remedied. Much of the action taken in this direction is materially facilitated by the early notification of disease which is given by an increasing number of medical practitioners. Great difficulties are experienced as to the water supply of Frodsham, and the blame for this is thrown on the central authority who, it is alleged, oppose every scheme submitted to them. The last attempt to deal with the subject has again been opposed on the ground that the supply in question was precarious in quantity and doubtful in quality—a decision in which Dr. Adams does not concur. In this he is supported by the county analyst, and by the result of experiments as to the quantity of water available. The death-rate for 1886 was 17·05 per 1000.

Friern Barnet Urban District.—The sewerage system does not appear to be as yet in working order in this district. When it is, it may be hoped that the complaints as to sewer emanations from ventilators, and as to which charcoal trays are admitted by Mr. Stott to be no proper remedy, will cease. Foul ditches should then also be done away with, the more so as at present they are associated with the prevalence of diphtheria and pneumonia. Some time since, Hornsey proposed to erect an infectious hospital close to this district. Opposition came from Friern Barnet, but now that the hospital is to be erected, joint action with Hornsey is suggested. The general death-rate for 1886 was 13·0 per 1000 living, but the zymotic rate was as high as 2·1, diarrhœa, due to defective sanitary conditions, being a cause of the excess.

Middlesex and Herts Combined Districts.—In his preliminary report on this combined district, Dr. Saunders refers to the fact that the repressive measures for the purification of rivers has been a conspicuous failure, and he is inclined to attribute this to the circumstance that attempted and actual legislation has been based on the assumption that trade pollutions were of the greatest consequence, and should be the first point of attack; whereas such pollutions are not nearly so serious as those which are brought about by the discharge of sewage into streams. And he next urges that, if our rivers are ever again to be clean, work must be done in their tributaries and in the sewer ditches which so often exist in rural and semi-rural districts. On the entire district the death-rate during 1886 was 16·4 per 1000, and the infantile deaths amounted to a rate of 116 under one year of age to every 1000 registered births. In the detailed descriptions of the several districts, attention is drawn to their most pressing sanitary wants. At times, as in Barnet, scavenging by the authority is urged; in other cases the need for keeping filth out of ditches the water of which is used for domestic purposes is dealt with. In the Watford rural district a serious epidemic of enteric fever took place in the London Orphan Asylum, the cause of the disease being set down as due to milk. In the Hendon rural district diphtheria at Little Stanmore again drew attention to the need for sewering the village; and at London Colney, in the St. Albans rural district, the school closets are reported as being in a scandalous state. This latter is a matter which should be brought under the notice of the Education Department, who can bring pecuniary considerations to bear upon school authorities. In some of the districts substantial improvements have been effected, some of these being of a permanent character; and we are glad to notice that the Albury Hospital, belonging to the Berkhampsted rural authority, has again served its intended purpose of preventing the spread of infection.

Epping Rural District.—The work done in connexion with infectious diseases is well set out in tables by Mr. Fowler, the action taken in each case being duly recorded. Diphtheria has been a serious cause of mischief in this district for some years past, and Mr. Fowler feels sure that it has not been due to any one specific cause, but that, having once been introduced, it has been spread by a variety of favouring insanitary conditions. Progress is fortunately being made as to water provision, and some good work has been done in the matter of drainage. The sanatorium has only been used for small-pox, no special demand having occurred for isolation in other cases. The death-rate for 1886 was 16·2 per 1000.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5787 births and 3621 deaths were registered during the week ending May 28th. The annual rate of mortality in these towns, which had been 19·7 and 20·3 per 1000 in the preceding

two weeks, further rose last week to 20·4. During the first eight weeks of the current quarter the death-rate in these towns averaged 20·6 per 1000, and was 1·7 below the mean rate in the corresponding periods of the ten years 1877-86. The lowest rates in these towns last week were 15·7 in Sunderland, 16·1 in Wolverhampton, 16·3 in Portsmouth, and 17·1 in Leicester. The rates in the other towns ranged upwards to 25·7 in Halifax, 26·0 in Preston, 29·5 in Huddersfield, and 32·3 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 500 and 532 in the preceding two weeks, were last week 522; they included 251 from measles, 143 from whooping-cough, 52 from scarlet fever, 31 from diarrhœa, 23 from diphtheria, 22 from "fever" (principally enteric), and not 1 from small-pox. No death from any of these zymotic diseases was registered during the week either in Wolverhampton or in Halifax; whereas they caused the highest death-rates in Salford, Manchester, and Norwich. The greatest mortality from measles occurred in Sheffield, Newcastle-upon-Tyne, Birkenhead, Salford, Manchester, and Norwich; from whooping-cough in Newcastle-upon-Tyne, Plymouth, Nottingham, and Preston; and from "fever" in Cardiff and Derby. No death from small-pox was registered either in London or in any of the twenty-seven large provincial towns. Only 4 cases of small-pox were under treatment on Saturday last in the metropolitan hospitals receiving cases of this disease; no new case was admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 294 and 289 in the preceding two weeks, rose last week to 333, and exceeded the corrected average by 44. The causes of 79, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Preston, Norwich, and in three other smaller towns. The largest proportions of uncertified deaths were registered in Huddersfield, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·5 and 21·3 per 1000 in the preceding two weeks, rose to 22·6 in the week ending May 28th; this rate exceeded by 2·2 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 18·0 and 20·1 in Leith and Edinburgh, to 24·8 in Aberdeen, 25·9 in Perth, and 27·4 in Greenock. The 564 deaths in the eight towns last week showed an increase of 32 upon the number in the previous week, and included 43 which were referred to whooping-cough, 19 to measles, 10 to diarrhœa, 6 to scarlet fever, 4 to "fever" (principally enteric), and not one either to small-pox or diphtheria; in all, 82 deaths resulted from these principal zymotic diseases, against 78 and 72 in the preceding two weeks. These 82 deaths were equal to an annual rate of 3·3 per 1000, which exceeded by 0·4 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 31, 36, and 42 in the preceding three weeks, further rose last week to 43, of which 14 occurred in Glasgow, 7 in Edinburgh, 7 in Dundee, 5 in Greenock, 4 in Leith, and 4 in Perth. The 10 deaths attributed to diarrhœa also showed an increase upon recent weekly numbers, and exceeded by 2 the number in the corresponding week of last year. The fatal cases of measles, which had declined in the five previous weeks from 30 to 10, rose again last week to 19, of which 15 occurred in Glasgow and 3 in Aberdeen. The 6 deaths from scarlet fever corresponded with the number in the previous week, and included 2 in Glasgow, 2 in Edinburgh, and 2 in Aberdeen. Of the 4 deaths from "fever," 2 were returned in Glasgow and 2 in Aberdeen. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 106, 120, and 126 in the preceding three weeks, declined again last week to 109, but exceeded the number in the corresponding week of last year by 23. The causes of 71, or nearly 13 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 24·4 and 25·4 per 1000 in the preceding two weeks, declined again to 24·1 in the week ending May 28th. During the first eight weeks of the current quarter the death-rate in the city averaged 29·7 per 1000, the mean rate during the same period being but 18·6 in London and 19·6 in Edinburgh. The 163 deaths in Dublin last week showed a decline of 9 from the number in the previous week; they included 17 which were referred to measles, 3 to "fever" (typhus, enteric, or simple), 3 to whooping-cough, 2 to diphtheria, 2 to diarrhœa, and not one either to small-pox or to scarlet fever. Thus the deaths resulting from these principal zymotic diseases, which had been 19, 20, and 24 in the preceding three weeks, further rose last week to 27; they were equal to an annual rate of 4·0 per 1000, the rates from the same diseases being 2·9 in London and 2·2 in Edinburgh. The fatal cases of measles, which had been 9 and 8 in the previous two weeks, rose last week to 17, and exceeded the number in any previous week of this year. The deaths from both "fever," and whooping-cough showed, however, a decline from the numbers in the previous week. The deaths of infants and those of elderly persons were also fewer than those returned in the previous week. Three inquest cases and 3 deaths from violence were registered; and 46, or more than a quarter, of the deaths occurred in public institutions. The causes of 25, or more than 15 per cent., of the deaths registered during the week were not certified.

HEALTH OF STOCKHOLM.

In the Registrar-General's recently issued Annual Summary it was shown that in twenty-four of the largest European cities, having an estimated aggregate population of more than ten millions of persons, the mean death-rate during last year was equal to 27·2 per 1000, and exceeded the mean rate in the twenty-eight large English towns by no less than 6·3. It appears that the rates in these European cities ranged from 21·4 in Christiania and 21·9 in Stockholm, to 33·0 in Prague, 35·0 in Marseilles, 37·8 in Buda-Pesth, and 38·0 in Trieste. The medical officer of health for the city of Stockholm has just issued a summary of the mortality statistics in 1886 for that city, and it may not be without interest to note a few figures bearing upon the mortality of one of the European cities showing for last year the lowest death-rates. The estimated population of Stockholm in the middle of last year was 213,762 persons. The birth-rate was 30·5 per 1000, and 2·7 below the mean rate in the twenty-eight English towns. More than 26 per cent. of the births were illegitimate, whereas the proportion in London does not exceed 4 per cent. With so high a rate of illegitimacy it is not surprising to find a rate of infant mortality out of all proportion to the death-rate at all ages. The return before us shows that the death-rate under one year was equal to 242 per 1000 living at this age; measured in another way, the deaths under one year were in the proportion of 218 per 1000 of the registered births, whereas the mean rate in the twenty-eight English towns did not exceed 169 per 1000. This high rate of infant mortality, in conjunction with the low death-rate at all ages, shows that the rate of mortality among adults in Stockholm was very low. The mortality from the principal zymotic diseases in this northern city was not on the whole high. No death from small-pox and only one from measles was registered, and the deaths from whooping-cough, scarlet fever, and enteric fever do not yield a high rate. The death-rates from diphtheria (including croup) and from diarrhœal diseases showed, however, a considerable excess, compared with the mean rates in the English towns. The aggregate deaths from the principal zymotic diseases gave a death-rate last year of 3·7, against 2·9 in the English towns, more than the whole excess in Stockholm being due to the greater fatality of diarrhœal diseases. Diseases of the respiratory organs and phthisis were somewhat less fatal in Stockholm last year than in London; while the death-rate from violence considerably exceeded the mean rate in the English towns. It is evident that, but for the terribly high rate of infant mortality, due to the markedly excessive proportion of illegitimacy, Stockholm would take a still higher place among the healthiest cities of Europe.

On the 28th ult. the Princess of Wales, accompanied by the Prince of Wales and the Princesses Louise, Victoria, and Maud of Wales, opened the "Samuel Morley" memorial wing of the Deaconesses' Institution and Hospital at Tottenham.

Correspondence.

"Audi alteram partem."

THE COLLEGE OF SURGEONS' EXAMINATIONS.

To the Editors of THE LANCET.

SIRS,—In the concluding paragraph of my letter to you last week I made a reference to Mr. Heath's statement "that the standard of the examination has been lowered of late." Mr. Heath has written to me to say that he "can find nothing in his letter to justify" such a reference, and to assure me that he has "never said so," and that he does "not believe or wish it." Mr. Heath's *ipsissima verba* in his letter to you were: "A good deal has been done to improve the College of Surgeons' examination, with the object of gaining 'less uncertainty,' and even 'in the way of diminished stringency.'" I was under the impression that this expression "diminished stringency" implied that it was easier to pass the examination now than formerly, but Mr. Heath informs me that he referred to the practice of rejecting candidates for three months only, and he is anxious to have this stated in your columns. But this "diminished stringency" has what Mr. Heath calls the "set off"—that the examiners have now the power to refer candidates for nine or twelve months.

I am, Sirs, your obedient servant,

May 31st, 1887. A. PEARCE GOULD.

To the Editors of THE LANCET.

SIRS,—"Audi alteram partem" is your motto, and I should be glad if you could find space in your columns for a letter dealing with the large "referred list" from a candidates' point of view. An ounce of fact is worth a pound of theory, and I believe I can lay before you some facts which may throw a little light on the problem.

Of the candidates for the recent examination for the final Fellowship of the College of Surgeons, four—whom I know personally—came before the same examiner at one of the pathology tables. Three out of the four were referred—a result which will, I think, not be wondered at, when you consider how their examination at that table was conducted. No. 1 was examined for the whole twenty minutes on concussion and compression of the brain. No. 2 was questioned about syphilis of bone, and then about hip-joint disease. No. 3 was questioned the whole twenty minutes on fractured base of the skull, and No. 4 was asked precisely the same subject as No. 3. With regard to the actual questions asked of these candidates, I am able to reproduce only a few. No. 2 was asked, "How do you classify hip-joint disease?" Answer: "Arthritic, acetabular, and femoral." "Oh, nonsense," replied the examiner, "I never heard of such a foolish classification." The candidate then used the phrase "rarefactive osteitis." It was not accepted, the examiner remarking, "Why do you use such long words?" No. 4 candidate was questioned on the treatment of fractured base, and replied, "Perfect rest and slop diet." "What slops?" was the next question. "Milk, and beef-tea." "Yes; how much?" "Oh, four or five ounces every two or three hours." "That is, twelve meals of five ounces; why you would bring about the very mischief you are trying to avert—viz., meningitis."

Now, Sirs, these facts give rise to several questions. 1. I would ask, Is it fair that a candidate should be examined during the whole time at one table on one subject only? I submit that if the examiner found Nos. 3 and 4 weak on fractured base, he ought to have given them no marks (if he liked) for that subject, and then to have passed to other matters, to give them a chance of making up. I submit that every man has a weak point, and I assert it is unfair, when an examiner has found that weak point, that he should press the candidate on it to the total exclusion of all other subjects. 2. What is a candidate to do who is not allowed to use a classification of diseases found in what is admittedly the best text-book? And how can he be expected to clothe the science of to-day in any other garb than the ordinary scientific language of the day? Thirdly, with regard to the food for a patient with fractured base, why did the examiner purposely take the greatest frequency and the highest amount, and then bring out a total which is obviously absurd, and couple it with the remark quoted? It would seem as though he were bent on making the candidate appear as foolish as possible, and were trying to find his weakness instead of his strength. Making the worst possible case from a candidate's answer is *not* the proper way to examine.

This letter can, I am aware, have no possible influence on the fate of the three unfortunates; but I hope it may have some little influence in drawing attention to some stumbling-blocks in the path of the candidates which, by very little consideration on the part of the examiners, can be most easily removed.—I am, Sirs, your obedient servant,

London Hospital, May, 1887. FRED. J. SMITH.

To the Editors of THE LANCET.

SIRS,—Few of us can look back upon our student days without recalling personal instances of the "luck" of examinations. The subject is by no means new, but, on the contrary, is a source of perennial discussion and complaint, unfortunately with but little or no improvement. It seems to me that the method of selecting examiners from the ranks of successful practitioners is far from satisfactory; it is not always the most successful surgeon or most brilliant operator that makes the best examiner even in surgery, much less in anatomy or any allied branch. I can see no theoretical objection, at any rate, to the creation of a special class of examiners, who should spend the *whole* of their time in making examinations which should be more frequent and more thorough. It would then be possible for the examiners to go from school to school as a board of inspection, or even to conduct the primaries at the schools, so as to take account of the school records and inspect the actual work of the candidates. The latter, although examined more frequently by the College authorities, would save, at any rate, by a diminution of the class examinations, for which at present they get no credit at the College.

I am, Sirs, your obedient servant,

May 29th, 1887. M.D., M.R.C.S.

THE TREATMENT OF RINGWORM.

To the Editors of THE LANCET.

SIRS,—While most cordially agreeing with your article and the first part of Dr. Wilkinson's letter on the above subject, I cannot allow such a statement as he has made to go unchallenged by one who has also seen a little of this troublesome complaint. I refer to the following: "I make a bold assertion when I say that the disease is to be cured with one application"; and then the one application is said to be warmed glacial carbolic acid. Surely Dr. Wilkinson would not advise this treatment for all varieties of ringworm, both recent and chronic, and at any age: Ringworm constantly spreads over half or even two-thirds of the scalp—would Dr. Wilkinson use glacial carbolic acid to a large portion of the head or to a young child? I trust none of your readers will attempt such an experiment. Of course, carbolic acid is a well-known and good application for small places of recent ringworm if used with care; but I warn everyone against using it to a large surface, as it may cause unpleasant results and even scarring. Secondly, I cannot agree that one application of carbolic acid always, or generally, cures even recent ringworm. What would be the use—as Dr. Wilkinson suggests—of washing the head from time to time with a lotion of sulphurous acid (an excellent remedy) if the one application of carbolic had already destroyed all the fungus? I do not even suggest what is the best treatment for ringworm; but I do think that, when such a strong application as glacial carbolic acid is advised in your columns for such a common complaint, there should also be given full directions with regard to the size of the places, and the variety of the disease it is to be applied to; whether for recent or chronic ringworm, and if for chronic, whether for patches only, or for that most troublesome variety where there are no distinct bare places, but only stumps and groups of stumps. Such disseminated cases undoubtedly often remain uncured, in spite of the application of every known remedy, even for years. Each variety of this disease requires special treatment, and every treatment requires special instructions to be given with it. Applications that would be most proper and perhaps successful, if used to a

small patch of recent ringworm, would be both useless and unjustifiable if applied to a large surface of chronic ringworm or to the disseminated variety. I do not for a moment think I can cure ringworm more quickly than other men; but I do maintain that no end of cases are said to be cured when the disease is only in its most ordinary chronic form. Thus the doctor who certifies such cases to be well gets the credit of quickly curing ringworm; while those who refuse to certify if there are any diseased stumps remaining (and it is often most difficult to detect them) are thought not to be able so successfully to cope with the disease.

I cannot close without a few remarks upon your most excellent leading article, especially about the fact that "probably not 3 per cent." of hospital cases "are seen to their complete recovery," if it ever take place before puberty; and thus, to poor people, ringworm is "practically incurable in chronic stages." It is, as you remark, "of the first importance that the appearances in the more chronic forms of ringworm of the scalp should be readily recognised." There is no doubt whatever that children still suffering from this disease are frequently sent back both to public and private schools, even with medical certificates. After a long experience with regard to "certificates," I most fully endorse every word you say. Scarcely a week passes but I examine children for admission into private schools who have obtained certificates from medical men that they are free from ringworm, but who are still suffering from it in a most chronic form. Medical men of the highest professional standing often make the mistake of thinking ringworm is cured because the hair is growing freely on the affected places. There is no greater fallacy, for the most obstinate forms of this disease are those where the hair has grown again on the places, but where a few diseased stumps are still to be detected with a lens among the long hairs. The diagnosis of chronic ringworm is easy enough provided the medical man knows what to look for. My advice is to take no special notice of scurf, or whether the long hairs are growing firmly or not. Scurf may exist in patches and long hair may come out easily without ringworm being present; and, again, there may be severe chronic ringworm, and yet the long hairs on the patches may be quite firm and but little scurf may exist. The only diagnostic sign of any value is the presence, or the absence, of short broken-off diseased hairs called stumps. Ringworm rarely exists (except in the earliest stages) without a few broken-off hairs being visible; and certainly if there are any left the case is not cured, and the child may give the disease to others. Diseased stumps can generally be easily recognised, without the aid of the microscope, by noticing whether they break off on attempted epilation with a pair of forceps. If the stumps break off easily, leaving the root part behind in the follicle, there is but little doubt the case is one of ringworm; but if they come out with the roots entire and atrophied, it may be alopecia only: the microscope will settle the question.

I trust my long experience with this most troublesome and often intractable complaint will excuse these somewhat dogmatic remarks.—I am, Sirs, yours obediently,

Christ's Hospital, May 27th, 1887. ALDER SMITH.

ECONOMY IN THE WARDS.

To the Editors of THE LANCET.

SIRS,—The embarrassed condition of the funds of many hospitals, large and small, has led to all sorts of expedients for cutting down working expenses. Reform in our expenditure is becoming a favourite cry, and the shifts that many institutions have had, perforce, to resort to for some time past will become almost universal. There is one department in which I am sure great saving with a little care might be effected, and that is in connexion with the materials employed in antiseptic dressings. I was brought up at the feet of Gamaliel, so to speak, under a master who enforced the most rigid attention to every detail of Listerism, and woe betided the unfortunate dresser who omitted the smallest portion of the mystic ceremonies that were pursued at every bedside—such washings, and purgings, and scaldings, and sprayings, that one left the hospital daily with one's hair and skin impregnated with pungent odours, that were ineffaceable, and which were carried out to the theatre or dinner party, to the disgust of one's neighbour and the discomfort of oneself. On leaving London I became house surgeon to a country infirmary, where sepsis and poultices were the order of the day, and stinking stumps and fetid fractures rendered the wards almost unbearable. By the courtesy of the visiting staff I was allowed to act the part of the proverbial new broom, and certainly I did make a clean sweep of some of the smells. But when the bills came in for the gauze and the salicylic wool, the pounds-shillings-and-pence argument came into play with the board, who could not be made to understand the abnormal rise in their expenses. Our finances were limited, and I had to cast about to see in what direction a saving could be made. In fear and trembling, I first discarded the salicylic wool, substituting ordinary wadding, with no evil results; then, in a rash moment, I dispensed with the gauze, using instead Gamgee tissue, but without the wounds becoming septic; then the green "protective" went the way of the gauze, and a strip of carbolised oiled lint took its place; and, lastly, to the intense relief of my cracked and frozen fingers, I abandoned the spray. In fact, I gradually threw overboard every detail of Listerism as then practised, without the least bad result. Accidents of the most serious kind were frequent, it being a great railway centre; and, with compound fractures and tolerably frequent injuries requiring amputations, the test was ample and sufficient. I can unhesitatingly affirm that with a preliminary cleansing with a solution of carbolic or corrosive sublimate—of course, seeing that all the instruments were carefully cleaned—amputations were performed without the spray, the wound covered with iodoform powder, two or three thick pads of Gamgee tissue applied, outside that a quantity of oakum with a common calico roller, and the results were as uniformly satisfactory, and perhaps more so, than we had before under the more complex and certainly far more expensive system of prepared dressings; in fact, the simpler the dressing used the better the wounds seemed to do. I could quote a dozen cases of the most serious injuries where it was of vital importance to exclude suppuration, and where, with no more precaution than careful ablution and a sufficiency of soft absorbent material for dressing, primary union took place without a rise of temperature or the least discomfort to the patient. I found wood-wool by far the best dressing; its cost was very little, and pads of it covered with old linen formed an all-absorbing covering. The saving to the hospital was immense; indeed, we could not have afforded Listerian dressings as then practised. I am not advocating a return to the old days of water dressings, &c.; I firmly believe in antiseptic dressings, but I am perfectly sure that in our hospitals, daily and weekly, pounds are wasted in precautions that could be dispensed with. I have carried out the same treatment in private practice, and with the aid of iodoform, common lint, and tenax, have secured as good surgical results as we used to do with layer on layer of gauze, protectives, prepared wools, and special bandages. The hospital I speak of was not in a particularly healthy town, and our sanitary arrangements at one time were very bad. I know it is said that these results cannot be obtained in London. That that is erroneous is shown by some of the remarkable results achieved by men who use far less precautions than I did. Of course, where economy is no object (and I judge that there are very few hospitals where that could be said), or in those where a certain formula for wound dressing is obligatory, this economy of dressings is not to be expected; but I am sure that, were the actual cost of the materials employed in some of our wards during a year published, the figures would astonish the natives and foreigners alike. I am, Sirs, yours obediently,

June, 1887. J. G. MARSHALL, M.B. Cantab., M.R.C.S.

THE UTILITY OF DRUGS IN THE TREATMENT OF DISEASE.

To the Editors of THE LANCET.

SIRS,—In my green and salad days I, like many others, fell away from the scholastic belief in the utility of drugs, my apostasy to a great extent being due to a blind hero-worship and following of the investigations of Sir William Gull into the treatment of rheumatic fever. Does he still hold that the temperature in this fever cannot be lowered by salicine, and that it matters not to the result whether we use this valuable and certain antipyretic or give

mint-water? Must we now shut our eyes to the brilliant investigations of Brunton, Murrell, Frazer, Rutherford, Fothergill, Garrod, and a host of other recent writers, who without doubt show that this epoch in the history of practical medicine is more remarkable than any other for the unbounded and intelligent faith which scientific practitioners have in the utility of drugs in the treatment of disease? Is this warm bed to replace the surgery, and the warming-pan the hypodermic syringe? Everyone must admit that it is bad to give too much medicine, but what is worse than the trade mark on the prescription is the taint of empiricism. This, we hope, is passing away.

We now know how quinine cures neuralgia; how the bromides and chloral give sleep; how digitalis may be given so as to act on the kidney, strophanthus on the heart, amyl on certain peripheral blood areas, pilocarpine on the sweat glands, ergot on the arterioles of the lungs and uterus, &c. By the light of this more exact and fuller knowledge we have come, by slow but sure steps, to believe more implicitly than our fathers did in the action of remedies, and to ignore that panacea of ignorance, "expectancy." Our drugs are purer and more elementary, our prescriptions simpler and more scientific; and, with his hypodermic syringe and the long array of accredited alkaloids, the physician not only trusts more to the action of his remedies, but even dares to look forward to the time when his art will be based on scientific certainty. It may or may not be true (for it is still *sub judice*) that vaso-motor pathology justifies Sir William's beautiful theory of arterio-capillary fibrosis; but no one can deny that to vaso-motor therapeutics the general practitioner owes much of that calm faith and comfort at the bedside which is the aim of all true rational medicine. I am a general practitioner and dispense my own prescriptions, but I claim as high a platform as any consultant, be he who he may, who is content to ignore the light which is now flooding the field of therapeutics.

I am, Sirs, yours truly,

JAMES MORE, M.D.

Rothwell, Northamptonshire, May 29th, 1887.

THE CONTAGIOUS DISEASES ACTS IN INDIA.

To the Editors of THE LANCET.

SIRS,—In your issue of April 16th, page 792, you furnish a few remarks on this topic. The following facts emphasise in a remarkable degree the gist of your observations. Lock hospitals were introduced into India in 1866. Following their establishment the ratio of venereal disease in the army fell in a most remarkable manner, so much so that in 1873 the ratio per mille was 166·7; from then till 1877 the reduction was stationary. From 1877 to 1884 there appeared a steady increase in the ratio. This increase was made the reason for a determined onslaught on the existence of lock hospitals. It was chiefly in consequence of the discredit thrown on these institutions by the late Sanitary Commissioner with the Government of India, in his yearly statistical comments, that an experimental *reduction* in their number was ordered to take effect from the early part of 1885. It was then that we saw a truly marvellous increase in the venereal ratio. The excess of the 1885 rate over that of the preceding ten years was 192·0 per mille in the experimentally unprotected stations and 61·2 in the protected. The outcome of this experimentally closing of some of the lock hospitals in 1884-5 was that 130·8 per mille of the troops in cantonments where the lock hospital was closed contracted disease; the same, had the hospital been left open, would have escaped. So conclusive have these facts been that the Government of India have recently reopened all the lock hospitals which had been experimentally closed. It is probable that several causes exist for the relative increase of venereal disease in the Indo-European army apart from the closure of some lock hospitals. They appear to be—(1) a larger proportion of young men in the ranks; (2) a larger number of inexperienced men; (3) a lesser number of married men; (4) the increase of cold weather manœuvres; (5) the improved general health of the army, which is consistent with greater prevalence of sensual desire. Factors though these may be, their existence in no way vitiates the value of lock hospitals in the cantonments of India, but rather points to the necessity for the continued establishment of every precaution against venereal risks.

I am, Sirs, yours faithfully,

R. H. FIRTH, F.R.C.S. Eng.,
Surgeon, A.M.S.

Dagshai, May 2nd, 1887.

MR. WARRINGTON HAWARD'S CASES OF TRANSFUSION.

To the Editors of THE LANCET.

SIRS,—In a recent number of THE LANCET there appeared a communication from Mr. Warrington Haward, describing a method of transfusion which he had successfully employed in a case of hæmorrhage. Mr. Haward is evidently under a misapprehension as to the authorship of the method in question. In June, 1883, my friend, Mr. J. M. Cotterill, was good enough to perform transfusion on a patient of mine. This he did, with complete success, by the method which Mr. Haward has carefully described. Recognising the great merits which this method possesses, Mr. Cotterill strongly recommended it to other surgeons here, who, like himself, have since frequently performed it with marked success. While Mr. Annandale, Mr. John Duncan, and many other surgeons, here and elsewhere, who have since that date performed transfusion by Mr. Cotterill's method, have testified to its ease and safety, it is here well recognised that the credit is due to Mr. Cotterill for having brought the method under the favourable notice of the profession.

I am, Sirs, yours faithfully,

Edinburgh, May 24th, 1887. J. GRAHAM BROWN, M.D.

"A DOCTOR'S INCOME."

To the Editors of THE LANCET.

SIRS,—Dr. Paget Thurstan, in his letter of May 21st, suggests that county hospitals are one of the causes which contribute to the under-payment of the great mass of the medical profession. With this suggestion I entirely agree, but altogether dissent to his proposed remedy. Dr. Thurstan suggests that the general practitioner should be allowed to follow his cases to the hospital, and should receive for so doing exactly the same fees as he would have received for attending the patient at his own home. He forgets that a large proportion of the inmates of our hospitals are men, and that their families, deprived of the weekly wages, have great difficulty in providing the daily loaf, and would be quite unable to pay a doctor remunerative fees. Again, a large percentage of the patients are drawn from the surrounding villages, making it impossible for the country practitioner to drive often several miles to the neighbouring town, quite out of his usual round, to visit his patient in the hospital. It is not the in-patient departments of our county hospitals which injure the general practitioner, but the out-patient. In the present day the wives and daughters of small farmers, tradesmen, and well-to-do working men are most frequently allowed to attend the out-patient department without any questions being asked them. They have learnt and are teaching others to seek their county hospitals when they are well enough to make the journey, and to fall back on the country practitioner when they are too ill to leave their own homes. The remedy lies with the medical profession. Throughout the kingdom we have our medical societies, which meet at various intervals during the year. Why should not this question of hospital abuse and other similar questions affecting the profession at large be freely discussed at such meetings? If this were done, hospital physicians and surgeons would realise more fully than they yet have the gross injustice they inflict on the general practitioner by treating in their own out-patient rooms at the hospital, without making any kind of protest, patients who are well able to pay their own doctor moderate fees which would remunerate him for his services. I would further suggest that it would be a good opportunity, now that the subject is exciting a great deal of interest, to arrange for a discussion of the question at the next annual meeting of the British Medical Association in August.

I am, Sirs, yours truly,

WM. COLLIER, M.D.,
Hon. Physician, Radcliffe Infirmary, Oxford.

May 24th, 1887.

To the Editors of THE LANCET.

SIRS,—The happy idea of Dr. Paget Thurstan in bringing out so lucidly the inner life of the profession deserves all praise. But there is a point not brought out fully in his letters to THE LANCET. I mean the estimate put by the

public generally, and those classes who are addicted to the habit of visiting the out-patient rooms of hospitals particularly, upon the value of a doctor's services. A case occurs in my practice just now which deserves publication. Nearly three months ago I was called from dinner to assist a brother practitioner at a confinement by the husband of the patient, with the request that I would be prepared to administer chloroform, and *go at once*. The man seemed to resent the slightest delay, and scarcely allowed me to walk. It was a difficult case; great force was required to bring the head into the world with the aid of forceps, and the patient was under chloroform a long time. Last Thursday I called and reminded the husband that I had received no remuneration for my trouble and care, and requested him to send at his convenience *half a guinea*. Last evening I received a note to this effect: He did not acknowledge his liability. His wife had contracted with my friend to be attended for a guinea. He had fetched me at the request of their doctor, and I must look elsewhere for the money, adding, "*as for 10s. 6d., I should have thought 2s. 6d.*" The man is in good business and dresses well. Comment is not needed.—Very faithfully yours,

Kingsland-road, May 15th, 1887. GEO. LOCKE, M.R.C.S.

To the Editors of THE LANCET.

SIRS,—I have read Dr. Paget Thurstan's letter in your issue this week with interest, and I may add a suggestion to those already made—i.e., hospital physicians and surgeons attached to schools should be kept to their own special work (consultation), not only in the out-patient department but also in a private capacity. Loud outbursts of indignation are heard should some indigent general practitioner in a semi-starved condition, and driven to his wits end for the needful, issue to the denizens of his local slums a circular that he gives advice and medicine for 6*d.*, and competes with hospitals and chemists; but would anything be said should a consultant publish bulletins in *The Times* newspaper as to the state of an illustrious patient's health? Where is the line of advertising to be drawn? Under the present condition of things the medical profession is divided into two classes by the so-called higher and lower standard, which division is only with regard to fees, not practice, and is as wide as the gulf which separated Dives from Lazarus; for since there is no chance to rise from one status to the other except by the Chinese fallacy examination, interest, and money, why should we of the lower grade be robbed and ruled by an oligarchy who will not allow us to have a voice in the management of our own institutions? It is an old saying that "Charity begins at home," and while there are so many of our poorer brethren, it seems hard that all remuneration should go to the fortunate few. I am, Sirs, yours &c.,

May 23rd, 1887. M.R.C.S.E.

ACTION OF HYOSCINE ON THE EYE.

To the Editors of THE LANCET.

SIRS,—In an annotation in your issue of last week (May 28th) under the above heading, you mention some recent observations of Dr. O. Waller of Dorpat and others on this alkaloid. In THE LANCET of Dec. 4th, 1886, Mr. Tweedy, in an article entitled "On the Mydriatic Properties of Hydrobromate of Hyoscine," described some comparative experiments which I made for him between hyoscine and atropine, and in which all the facts noted by Dr. Waller had been observed. I am, Sirs, yours truly,

E. TREACHER COLLINS.

Royal London Ophthalmic Hospital, Moorfields, June 1st, 1887.

COLLEGIATE LECTURES.—Dr. Leonard Charles Woolridge commenced his course of three lectures on "Physiology of Nutrition" in the theatre of the Royal College of Surgeons on the 1st inst., and will be succeeded on the 8th inst. by Professor Christopher Heath, F.R.C.S. Eng., who will deliver three lectures on "Certain Diseases of the Jaws." The annual course of lectures will be brought to a close by Professor Henry Power, F.R.C.S. Eng., who will deliver three lectures on "The Relations of Ophthalmic Disease to Affections of the General System," commencing on June 17th. The lectures will commence at 4 P.M. precisely each day.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

NEWCASTLE EXHIBITION.

OUR Exhibition continues to increase in popular interest, and, notwithstanding gloomy and at times wet weather, the attendance is upon the whole very satisfactory. Yesterday, being Whit Monday, 45,000 passed in, making the total attendance since the opening on May 11th over 250,000. I should not omit to mention the model of the new infectious diseases hospital for the borough at Heaton, and now nearly complete. Last week a deputation from the Corporation of Nottingham, with Dr. Whitelegge, their medical officer of health, came over to see the hospital. They were received by the Sanitary Committee of our Corporation and the medical officer of health, Mr. H. E. Armstrong. They expressed themselves as being well rewarded for the trouble of the journey by the inspection of the building. Visitors to Newcastle should by no means omit to see the museum of the Natural History Society, which is a few steps from the Exhibition and on the same road. It is well known to be one of the best collections of natural history objects in the kingdom, and is frequently visited by foreigners. It has lately received some interesting additions, including a fine specimen of the echidna, porcupine ant-eater. This animal, which is peculiar to Australia, greatly resembles the hedgehog, but a little examination shows that it differs much from the spiny hystrix. The echidna is about a foot in length, and its body is covered with strong spines. The head consists of a long tapering snout, like the bill of a bird, from which it protrudes its long slimy tongue, and captures its food in the same manner as the great ant-eater. The limbs are short and strong, and the forelegs are armed with large and powerful claws, with which the animal burrows into the ground very rapidly. It is very apathetic, and tries to get out of sight quickly. It also rolls itself like a hedgehog, and in this way defends itself from attack. Another late addition, which, though not perhaps of great importance from a scientific point of view, possesses an interest peculiarly its own on account of its association with a name dear beyond Northumbria, Grace Horsley Darling. It is a collection of shells, crustacea, and birds' eggs, gathered on the Faroe Islands by Grace Darling and her father, and was bequeathed to the museum by her sister, Miss Thomasine Darling, who lately died at Bamburgh.

FEVER IN NEWCASTLE

At a late meeting of the Newcastle Sanitary Committee, the medical officer of health, Mr. H. E. Armstrong, reported that during the past fortnight there had been 1 case of small-pox, 7 of typhus fever, 14 of enteric fever, 1 of continued fever, 27 of scarlet fever, and 2 of diphtheria—a total of 52 cases. As regards the outbreak of typhus in the east end, it appears that there have been altogether 38 cases, all of which, with the exception of one, have been removed to the Fever Hospital. The solitary patient, who refused to go, caused a good deal of trouble by his obstinacy, and was the means of infecting two or three people who nursed him, each of whom had to be taken to the hospital.

Newcastle-on-Tyne, May 31st.

EDINBURGH.

(From our own Correspondent.)

THE VOLUNTEER MEDICAL SERVICE.

SUCH has been the success attending the formation of an ambulance corps amongst the students of the Edinburgh School, that it has now been decided to proceed further in this invaluable movement, and to raise a corresponding company from amongst the citizens of Edinburgh. The students' company, raised two years ago in response to the earnest appeals of Surgeon-Major Evatt, and commanded by Mr. C. W. Cathcart and Dr. Sims Woodhead, is constantly kept at its full strength; it has received official recognition and a definite status at the War Office, and it now takes part in all the movements carried out by the Volunteer regiments to which it is attached, in which both officers and privates

display much enthusiasm and devotion to the work they have undertaken. Although the new citizens' company will not possess the technical knowledge of the medical students that makes their corps so specially effective, it will probably be largely recruited from men who have taken some interest in the ambulance classes held in Edinburgh during the last three years; and starting on this basis some careful training in their work and frequent practice cannot fail to make the new corps a valuable addition to our Volunteer establishment.

THE ETIOLOGY OF SCARLATINA.

The announcement of Dr. Klein's discovery of a microbe that bears a causal relation to scarlatina has been received with great interest in Edinburgh; the more so since it has been known for some months that an elaborate research on the same subject was in progress towards completion in the laboratory of Professor Chiene. The matter was taken up by Dr. Jamieson, of the City Fever Hospital, early in the course of the recent epidemic in Edinburgh, and he and Dr. Edington, assistant to the Professor of Surgery, are reported to have isolated the *materies morbi* in the form of a small bacillus, whose life-history, physiological and pathogenic characteristics they have accurately defined. I hear that their paper has been for some weeks in the hands of the publisher, and that its immediate appearance is anticipated. There is a general curiosity here to know whether their results and those of Dr. Klein will be found to agree.

THE ROYAL INFIRMARY.

By the will of the late Mr. Archibald, of Edinburgh, a sum of £1000, free of all duties, has been left to the general funds of the Royal Infirmary.

ST. ANDREWS AMBULANCE ASSOCIATION.

A demonstration of ambulance work, under the auspices of the Scottish Association, is announced to take place in the Waverley market next week, and elaborate preparations are in course of completion, which should give it great interest in the eyes of the public. Recent cases of street accidents and of disasters in large manufactories have clearly shown the value of the work done by the Association. In particular, the Portobello police force have been of late complimented for their efficient treatment of a compound fracture that was found admirably treated on "first aid" principles on its arrival at the Royal Infirmary.

Edinburgh, May 31st.

DUBLIN.

(From our own Correspondent.)

THE QUEEN'S BIRTHDAY HONOURS.

LAST week I drew attention to the paucity of State honours doled out to the medical profession in this country by successive Governments. I now wish to add that, as regards the medical branch practising in Dublin, there is a leading physician whose claim ought in no way to be forgotten. I refer to Dr. William Moore, a physician of the highest eminence, who has filled numerous important positions in a manner not to be surpassed, and who is regarded with the greatest esteem by his professional brethren. Dr. Moore also holds the high position of Physician in Ordinary to Her Majesty in Ireland. These are considerations which ought to have due weight with Her Majesty's advisers.

HEALTH OF DUBLIN FOR 1886.

The death-rate in the city of Dublin for 1886 was 28·4 per 1000, while in 1885 it was 30·69, and in 1884 it was 29·96. The deaths due to zymotic diseases amounted to 823, or a decrease of 188 as contrasted with the year preceding. It appears from the annual report by Sir Charles Cameron, the efficient medical officer of health for Dublin, that one of the most serious factors in the Dublin mortality bills is pulmonary consumption. This malady caused 984 deaths in 1886, 988 in 1885, and 999 in 1884. It is remarkable that while the general and zymotic death-rates are declining, the mortality from constitutional diseases shows no decrease. It is satisfactory to learn that a substantial reduction in the death-rate of Dublin has taken place within the last six years, and the reduction has been mainly in the mortality caused by infectious diseases—those which sanitation can most effectually deal with. With our present underfed, poorly-clothed, and badly-housed working population, we can hardly expect that the death-rate from all causes can be reduced to that of the prosperous cities of England. It is, however, some consolation to reflect that in 1886 we had the lowest mortality since registration of deaths commenced in Dublin, that our zymotic death-rate was well below the average in English towns, and that our general mortality was less than the average general mortality of the chief continental cities. The mortality due to constitutional diseases is, however, still excessive in Dublin; but the measures for lessening it must be sought for in the domain of political economy as well as in that of hygeia. As Sir Charles Cameron points out, just in proportion as the people are well fed, well clad, and well lodged, will they, by reason of their higher vitality, be able to resist the assaults of both constitutional and infective diseases.

M. PASTEUR'S TREATMENT OF HYDROPHOBIA.

The guardians of Thurles Union some time since sent to Paris a youth named Hayden, who had been bitten by a mad dog, to undergo treatment by M. Pasteur. Attenuated virus was daily injected on twenty-nine occasions, and Hayden was to leave Paris on a certain day for home. On April 19th he arrived at the institute, and on May 17th arrangements were made that he should return to Ireland. The day after he left the institute the boy went out for a walk, and on his return to his lodgings he complained of pain in the stomach, which was followed by vomiting and convulsions, death taking place thirty-six hours afterwards from hydrophobia.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

A meeting of the Fellows is to be held to-day (Saturday), to receive the annual report of the Council, when the following motion by Sir Charles A. Cameron will be under consideration:—"That the College regret the failure of the attempt to unite the Colleges of Physicians and Surgeons and the Apothecaries' Hall for the purpose of holding examinations. The College is of opinion that a fresh attempt to effect this tripartite combination should be now made—the Medical Council having recognised the Apothecaries' Hall as a medical corporation; and should such an attempt again fail, the College considers that the Council should, if possible, form a combination with the Apothecaries' Hall."

Dublin, May 31st.

PARIS.

(From our own Correspondent.)

CURABILITY OF LOCOMOTOR ATAXIA.

M. BABINSKI related at the Society of Biology the cases of several ataxic patients who had been cured. One of these patients, after having suffered for ten years from violent lightning pains, which prevented him from undertaking any kind of employment, at least three times a week, has been cured for the last five years. In another case the symptoms set in with violent pains, disseminated anæsthesia, and urinary and fæcal incontinence. During ten years the disease steadily increased, then grew gradually less severe, and for the last four years the patient has been quite well. The third observation is, however, the most interesting, inasmuch as the anatomical proof of the recovery from previous disease was obtained. The patient was a woman whose symptoms comprised grey degeneration of the optic nerve, lightning pains, gastric crises, and abolition of reflexes; no incoördination. M. Charcot has frequently shown this woman at his lectures as a typical example of tabes fruste. The pains, after existing for twenty-five years, completely disappeared. The patient died five years later of pneumonia. The post-mortem examination of the cord showed unmistakable lesions of locomotor ataxy; but, with the exception of blindness, recovery had taken place from all their consequences. Dr. Brown-Séquard said that he had long been convinced of the possibility of such recoveries, but he was happy to find the evidence brought forward by a school opposed to his doctrines. It proved conclusively, as he had always taught, that lesions of the nervous centres do not give rise to symptoms, as destructive lesions,

but by an inhibitory action on other parts. In reply to a question, it was stated that one of the patients had been to Lamalou ten years in succession, and had always returned improved. The others had been treated by revulsives. Dr. Brown-Séquard observed that it was important to apply revulsive treatment, not to the back, as was generally done, but to the lower extremities. The cord is acted upon in this way by all the sensory nerves, and the effect greatly increased. He quoted the case of a medical man, who was cured of locomotor ataxy by circular blisters around the leg and thigh. The same treatment is also of the greatest value in epilepsy with aura.

TREATMENT OF INTESTINAL OBSTRUCTION.

An interesting discussion has been provoked at the Société de Chirurgie by a paper by Professor Verneuil on the Treatment of Intestinal Obstruction. The practical conclusions would seem to be that if the course of events does not give rise to immediate anxiety, medicinal means, such as purgatives, enemata, rectal douches, and electricity, should be tried in the first instance. These means should not, however, be relied upon too long, as thereby time is lost and they exhaust the bowel. M. Marc Sée's case of recovery by the use of rectal douches forty-five days after the onset of the symptoms is entirely exceptional. A surgical operation being decided upon, two choices are open, each having its special indications—laparotomy or artificial anus. When the diagnosis is easy and the obstruction is known to result from chronic disease, such as cancer, there is no question as to the treatment to be preferred. An artificial anus must be made, either on the right, as advised by M. Le Dentu, or at the iliac flexure, as counselled by Professor Verneuil. When the symptoms have set in acutely and there is good reason to believe that they depend upon an obstacle that can be removed by reasonable exploration, laparotomy should be resorted to. In a great many instances of acute and subacute obstruction of the bowels the Society recognised that a diagnosis was impossible, notwithstanding the opinion of M. Desprès that it ought to be made ninety-nine times out of a hundred. Opinions were divided as to the best treatment. M. Verneuil would treat symptoms and make an artificial anus; MM. Trélat and Le Fort prefer laparotomy; and if a short exploration prove fruitless, the operation should be transformed into enterotomy.

THE INSTITUT PASTEUR.

It is said that M. Pasteur has once more modified his method of anti-rabic inoculations. For simple wounds he has returned to the first system of mild attenuated virus. For bites about the face and head, and severe bites about the body, more virulent medullæ are used, but these do not attain the virulence indicated by M. Pasteur in his last communication. The last three deaths are: Ph. Hydram, aged fifty-six, bitten on October 5th, and treated from the 10th to the 21st of the same month; died on April 21st of rabies. J. B. Gachet, twenty-five years of age, bitten on April 4th, treated from the 10th to the 20th, and died on May 2nd. J. Hayden, aged eight, bitten on April 16th, treated from April 22nd to May 15th; died on the 18th.

THE BURNING OF THE OPÉRA COMIQUE.

It is to be hoped that the catastrophe at the Opéra Comique will lead to some practical improvements in the Paris theatres. This is a subject which comes up every time a large and fatal fire takes place; but like the periodical typhoid fever scare, it is forgotten as soon as the balls for the benefit of the sufferers are over, and the persons who fatten upon charity organisations have closed the accounts of the transaction. It is somewhat ghastly that one of the official medical advisers to the administration of the Opéra Comique should be the Professor of Public Health at the School of Medicine. Perhaps this calamity will prompt him to ascertain whether there are any other duties attached to the post than those which consist in applauding the actors once or twice a month, and occasionally prescribing orange-flower water for a lady of the troupe suffering from her *nerfs*. The papers publish a note upon an examination of the blood of the victims, said to have been made at the Morgue by M. Brouardel, and which would show that death occurred in three different ways—(1) from fright; (2) from asphyxia by carbonic acid; (3) by asphyxia from carbonic oxide. Apparently no one was crushed to death, which is scarcely likely.

HYPNOTISM IN THE PARIS HOSPITALS.

Although hypnotism is not practised here on as large a scale as at Nancy, there are some cases which medical men visiting Paris should see. MM. Charcot, Luys, Dumontpallier, and Mesnet have the most interesting subjects at the present moment, the last-named gentleman having a woman under his care in the Salle St. Martine at the Hôtel Dieu who was confined without consciousness during the hypnotic sleep.

Paris, June 2nd.

EGYPT.

(*From our own Correspondent.*)

RABIES AND HYDROPHOBIA.

THESE diseases are almost unknown in Egypt, but the fact that the police in Cairo have during the last eight months destroyed 5233 street dogs has been construed by some lay journals into a belief that a large number of persons had been bitten by rabid dogs, and had died of hydrophobia. Pariah dogs, which act as scavengers in the native quarters of the town, are destroyed in considerable numbers every year, and the extra energy of the police during the past winter was only caused by various complaints of householders who were kept awake at night by sleepless mongrels, which had become far too numerous. Griesinger, Larrey, Watson, and many other writers say that rabies and hydrophobia are quite unknown in Egypt, but Fleming notices that travellers have asserted the presence of rabies here. Most of the cases reported during the last five years have been very doubtful, though some have been observed by European doctors in Cairo and Alexandria. An argument employed to prove the existence of the disease is that the Bedouins have a well-known remedy for bites, consisting of a hard pointed root, which certain of their "medicine men" thrust into the fire and then cauterise with it the wounds of the bitten.

CASE 1.—In December, 1882, a Swiss doctor near Cairo was called hurriedly to see an Egyptian gardener, whom he found lying on the ground, much excited, foaming at the mouth, and being held by three men. He had occasional convulsions, during the intervals of which he bit the doctor in the back of the hand while his pulse was being felt, and within half an hour he died, and was buried without a necropsy. The doctor then heard that twenty-eight days previously the man had been bitten in the forehead by a cat, and for the last three days had been unable to drink. Until three days before he had been quite well, though formerly troubled with asthma. The cat was killed after it had bitten a soldier through his trousers, and its body was not examined. The doctor and the soldier have never suffered from their bites. The man apparently bit the doctor to show his hatred of a Christian. In May, 1886, twelve women and children were bitten by a wolf in the early morning near Cherbin. The wolf was seen standing over a small child gnawing at its head, and the child died fifteen days after from its injuries. It was proposed by two native inspectors to return this case as hydrophobia, but their opinion was rightly overruled by an English veterinary surgeon. The other eleven bitten people recovered satisfactorily.

CASE 2.—Again, in May, 1886, a cat in Upper Egypt bit two natives, who were sent to Paris to be treated by M. Pasteur. This case rests on the evidence of M. Piot, an able French veterinary surgeon, who disinterred the cat two days after burial and inoculated two rabbits from it. The two rabbits died from either rabies or septicæmia.

CASE 3.—In August, 1886, an authentic case of dumb rabies was certified by English veterinary surgeons as occurring in a suburb of Cairo in a terrier belonging to the Army of Occupation. The terrier was kept under observation, but unfortunately escaped one night, and was found dead in the desert the next day.

CASE 4.—In October, 1886, three Syrian children in Cairo were bitten by a dog, of which nothing is known. Six weeks later, Dr. Grant was called to see one of these children, aged six, who had a scar from the bite at one angle of his mouth, and was then complaining of fever and of a burning sensation in the throat. The medicine prescribed could not be swallowed, and the child passed a

very excited night, leaping incessantly in and out of bed, and refusing to drink a chloral draught. Early next morning the boy was seen, with a frightened harassed air, sitting at the far corner of a large bed, like a monkey, and again complaining of his burning throat, his temperature being still raised. He trembled all over when water was called for, but had no convulsion until it was brought near him. He was thirsty, but absolutely refused to try to drink, though after some shuddering he could extend two fingers at arm's length, touch the water, and then apply his fingers to his tongue. An attempt at hypodermic injection induced so many convulsions that it was abandoned. The same night the boy was seen again by Dr. Grant, two colleagues, and a French veterinary surgeon. The boy was then extremely excited, and could only be kept on the bed if his mother sat upon it with him. When a light was brought he dodged round his mother to avoid it. A touch of the hand induced convulsions, and each of the doctors singly tried, but failed, to inject morphia. The boy died the following morning, but there was no necropsy. The other two children were then sent to M. Pasteur for treatment, and have remained well.

CASE 5.—In January, 1887, the dog of an Austrian woman bit her in the nose, and she has undergone M. Pasteur's treatment with success. The dog died presumably of rabies. From the pons Varolii of the dog's brain two rabbits were inoculated in the eyes by Mr. Littlewood, and cerebro-spinal fluid was further injected under the skin of their thighs. Fourteen days after one rabbit died without symptoms of rabies; the lungs were very congested, but there were no other important facts noted at the necropsy. The second rabbit on the fifteenth day suffered from marked photophobia, hiding itself from the light, facial paralysis, and convulsions of the whole body. Death occurred six hours after these symptoms were first seen. All the organs were found deeply congested and the bladder was full of urine. Mr. Littlewood believes that this second rabbit died of inoculated rabies. Unfortunately, no thermometrical observations were made to test the rapid loss of heat which seems pathognomonic of the Pasteurian inoculations.

CASE 6.—On Feb. 15th, 1887, an Egyptian was bitten by a wolf, of which nothing is known, in a village near Tantah. Thirty-seven days later, on March 24th, a Greek doctor certified that this man had died of hydrophobia. He complained of headache and was delirious, and refused to drink for two days before death, and on the day preceding death he fell down some steps, but without injuring his head. At the necropsy, the lungs were found gorged with blood and inflammation in the membranes of the brain. The larynx, pharynx, intestines, and kidneys were normal. From the brain of this man two rabbits were inoculated, as in the last case. They were fed on bran instead of clover, and both became thin and wasted, one of them dying of starvation. At the necropsy great atrophy was seen, but no congestion of the organs. The second rabbit was then returned to a clover diet, at once improved in health, and is now perfectly well.

The Sanitary Department now does all that it can to encourage bitten people to bring the dogs to be watched, instead of their being at once killed. Since October last more than a dozen dogs have been kept under observation for periods exceeding one week, and, so far, in every case the dogs have proved to be healthy. The above record of six cases, including doubtful ones, represents all the returns of hydrophobia in Egypt during the last twenty years.

RELAPSING FEVER.

Occasional small outbreaks of this fever have been reported this year by native doctors in Lower Egypt, but they have not been verified by any skilled observer. During March and April there were eight cases reported from an overcrowded prison at Damanhour, of which one died.

ELEPHANTIASIS.

M. Innes, Curator of Museums at the Medical School, believes that he has recently discovered a bacillus which is special to the erysipelatous elephantiasis of the Arabs. The bacillus, coloured blue by methylene and not affected by the Ehrlich method for colouring the leprosy bacillus, occupies in masses the connective tissue which forms the scrotal or other tumour. Under a microscope of 1200 diameters it appears straight, slightly swollen at its middle, and tapering at both ends. But this investigation will require much subsequent confirmation. The eggs of the filaria sanguinis hominis are rarely found in cases of elephantiasis in Egypt.

BLIND AND DEAF SCHOOL IN CAIRO.

This school is deserving of praise because it is entirely under native direction, and because the houses and all their contents are scrupulously clean. Of the blind, there are now thirty-one boys and twelve girls, who learn reading, writing, arithmetic and geography, besides mat and chair making, silk weaving and carpentering. Most of the children were suffering from extreme corneal opacities after granular lids. On the deaf and dumb side there are nine boys and eight girls being taught by deaf teachers.

Cairo, May 21st.

MEDICINE AMONG THE MOORS.

(From a Correspondent.)

THE mantle of Avincenna or Adul Axis has not fallen on the shoulders of the modern Moorish doctor. The leaders of scientific research and progress during the dark ages have not advanced, but, on the contrary, they have materially retrograded. Superstitions have gained ground; scientific precepts have been forgotten; astrology is still associated with medicine; and for the little skill occasionally displayed, and a few good local remedies, we have, as an offset, an appalling prevalence of crude ignorance and savage superstition that can scarcely be exceeded, even in the most barbarous parts of the world. The Moorish "medicine man"—we can hardly call him doctor—certainly displays some skill in couching for cataract. He has also an original method of curing irritation of the eyes due to the presence of foreign bodies: with much skill he passes his tongue over the open eye of the patient, and thus, without irritating, removes the sand, grit, &c. For cupping, the Moor also makes good use of his mouth: a cow's horn is placed over the part, and from a hole at the point of the horn the operator sucks out the blood &c. But the Moor who ventures on such treatment will, with equal confidence, prescribe gold dust, or the scrapings from the horn of a rhinoceros, as an emmenagogue; and will give an idle man ants to eat, or suggest that a coward should try and procure for his meal a little lion's flesh. The fumes of the burning bodies of animals are supposed to be a good remedy for anæmia.

In such matters the Jews of Barbary, who form an important section of the population of Morocco, are as superstitious as the Moors with whom they live. Though naturally a gifted and highly intelligent race, the Jew is as prone as the Moor to attribute his ailments to the intervention of evil spirits. If a man is ill, it is customary to place a dagger under his pillar so as to intimidate the evil one. At the birth of a child, the father, if he is a Jew, takes a big and sharp sword with which he cuts and slashes about the room in the hope of destroying the evil spirits that may be seeking to retard his wife's convalescence or that menace the child's future. Should this be considered insufficient, the pots and pans are violently struck together, and everyone helps to make an alarming noise under the impression that it will frighten illness away. This disturbing method of warding off the dangers of the situation is continued till the seventh day, or the time of circumcision When, on the other hand, there is no family, the empiric practitioners of this country have propagated the very convenient belief that a sapphire, an emerald, a pearl, and some coral ground into powder and mixed with alcohol, constitutes an effective drug for the cure of barrenness. It is needless to say that the patient is not allowed to grind up the precious stones herself, but must confide them to the care of her medical adviser.

Nevertheless, by the side of these absurdities there are some good remedies employed. The Moors, for instance, use the actual cautery, and, by freely applying red-hot irons to the skin, often succeed where in more civilised practice the mustard poultice or the blister fails. Excellent syrups are made for coughs and colds by simply boiling figs, dates, and raisins; while the huge, thick, prickly pear leaf, when cut in two and heated, is a very good substitute for the linseed poultice. The same leaf, put on a plate and covered with brown sugar, will make a very good cough lozenge when the sap oozes out and mixes with the sugar. For fracture, the limb is dressed with splinters and tow soaked in honey. The honey, of course, attracts a multitude of flies, and thus

augments the annoyance the patient has to endure; but, nevertheless, some skill is sometimes shown in the dressing of wounds. A plant, vulgarly known among Europeans in Morocco as the "donkey's fig," and called by the Arabs the "Feghouz elhmir," is much used in jaundice. Cut in two and held to the nose, it will cause a violent irritation of the nasal mucous membrane, followed by a copious discharge, which it is thought relieves jaundice.

The henna sold for staining the heels of the foot and the nails of the hand a bright orange red, which among Arab women is a favourite method of ornamentation, is also employed as an astringent for eruptions on the heads of infants. The root of the wild grenade, or assouak, is effective as an astringent for the lips and gums, and it imparts a marvellous whiteness to the teeth. For the purposes of a purgative the Arabs generally resort to a decoction of senna and honey. The "khol," or sulphate of carbon, with which the women black their eyelids, is used not only from motives of coquetry, but to help to cure slight ophthalmia. This latter reason is said to account for the fact that men also occasionally paint their eyes. It is strange, however, that this painting is especially prevalent on festive days, notably during weddings. Is it only when their powers of vision are more or less affected that Moors make up their minds to incur the pleasures and dangers of matrimony? Such a supposition is not a complimentary reflection on the personal appearance of Moorish women; but, nevertheless, men even in Morocco do not care to admit that they paint merely to satisfy their personal vanity.

Undoubtedly the fatalist theory of the Mahomedan religion is chiefly responsible for the deplorable ignorance prevalent on all medical matters. The Moor considers it more or less wicked to avail himself of the science of the Christian. For instance, at Tangier the Minister of Foreign Affairs has been urged over and over again to have some false teeth. He, however, invariably replies that, if God has thought fit to deprive him of his teeth, it is not for him to set at defiance the will of the Almighty by putting in false teeth. In the same manner, the actual Governor or Bashaw of the Province of Tangier obstinately refuses to avail himself of the advice of any European practitioner, though his health is in a very precarious condition. This fatalistic resignation has been combated with much energy by the Bashaw's European friends, as they greatly value his life, and fear it will be difficult to find a successor equally energetic in putting down abuses. Nevertheless, the Moors will very rarely follow the advice of European doctors. With the exception of a few rough remedies to relieve pain, they generally prefer to trust in Allah, or else resort to necromantic practices.

THE SERVICES.

Deputy Surgeon-General Jas. H. Thornton, C.B., I.M.S., has been awarded an Indian good-service pension from Dec. 8th, 1886, in the room of Col. Sir F. B. Norman, K.C.B., Bengal Staff Corps.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Surgeon Robert Arthur Simpson, M.B., has been allowed to withdraw from Her Majesty's Naval Service with a gratuity.

The following appointments have been made:—Fleet Surgeon William Graham to the *Unicorn;* Fleet Surgeon Henry A. Clone, to the *Durham* (to date from May 28th); Staff Surgeon Matthew F. Ryan, to the *Tamar;* Staff Surgeon Henry Beaumont, to the *Invincible* (to date from May 28th); Staff Surgeon Michael Roman, to the *Rover* (to date from May 28th); Surgeon Alexander N. French, to the *Agincourt;* Surgeon James Rogers to the *Pembroke;* and Surgeon Charles F. Newland, to the *Invincible* (to date from June 2nd).

ROYAL NAVAL ARTILLERY VOLUNTEERS (London Brigade). Alex. Stewart Brown, to be Surgeon (to date from May 28th, 1887).

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.—The thirty-fifth anniversary festival of this institution was held on the 25th ult., the Marquis of Ripon presiding. Since the establishment of the hospital in 1854, 400,000 out-patients and 24,000 in-patients have been treated, the numbers last year being 15,000 and 1100 respectively. A list of subscriptions and donations amounting to upwards of £1500 was during the evening announced by the secretary.

Medical News.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 26th ult. the following degrees were conferred:—

DOCTOR OF MEDICINE.—Henry Lewis Jones, Gonville and Caius.
BACHELOR OF SURGERY.—James Kerr, St. John's.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At recent meetings of the Court of Examiners the following obtained the Fellowship of the College:—

Thomas Higgins. | John H. Scott.

SOCIETY OF APOTHECARIES.—The following gentlemen, having satisfied the Court of Examiners as to their knowledge of the Science and Practice of Medicine, Surgery, and Midwifery, received certificates entitling them to practise as Licentiates of the Society on May 26th:—

Dean, Henry Percy, Anson-road, Tufnell-park.
De Renzi, Arthur Castriot, The Chaplain's House, H.M. Prison, Wandsworth.
Clark, Calvin Worcester Day, Regent-square.
Harris, Worsley John, Bennett-park, Blackheath.
Johnson, Harold Jossé, Bishopsgate-street.
Maunsell, H. Rosser, Lynchmere, Maberley-road, Upper Norwood.
Read, Henry George, Finsbury-square.
Servaes, Francis Charles, Northern Hospital, Liverpool.
Thomas, John Lewis, Brynmowr, Breconshire.
White, Charles Percival, Furnival's-inn, Holborn.

VACCINATION GRANT.—Mr. Julius Cæsar, Minster in Sheppey, has received the Government grant for successful vaccination (first time).

THE War Department has granted a piece of land at Woolwich for the erection of a hospital in commemoration of the Queen's Jubilee.

ON the 26th ult. the Metropolitan Counties Branch of the British Medical Association held a highly successful conversazione at the South Kensington Museum.

THE Danish corvette *Dagmar*, which has been on a cruise in the North Sea with cadets, has put into Sheerness Harbour with three cases of diphtheria on board. The patients were admitted to Melville Hospital, Chatham.

THE SALE OF POISONS.—Cases are occurring almost every week which show the urgent need of reform in the Sale of Poisons Act, and of the greater stringency in the enforcement of the provisions already in existence.

BEQUESTS.—The late Mr. G. Woods Maunsell has left £50 to the Adelaide Hospital, Dublin. Mr. Wm. Magrath has bequeathed £500 to each of the following institutions—viz., Mater Misericordiæ, Vincent's, and Jervis-street Hospitals.

EAST LONDON HOSPITAL, SHADWELL.—The annual court of governors of this institution was held on the 31st ult., when it was reported that 16,012 patients had been attended during the year, making 178,644 since the opening of the institution in 1868. The receipts for the past year amounted to £7053, against £6699 during the preceding year, and the total expenditure was £6803.

ASSOCIATION OF PUBLIC SANITARY INSPECTORS.—On the 28th ult. the second provincial conference of the members of this Association was held at Eastbourne. Papers on health, drainage, and sanitary questions generally were read and discussed, amongst those present being Dr. A. Carpenter, Mr. G. A. Wallis, Mr. Toms, and Mr. Walter Grant. After the conference the Association visited the places of interest in the town.

PRESENTATIONS.—Dr. Lawton Roberts has been presented with a copy of Keith Johnston's "Royal Atlas of Modern Geography," a case containing an inkstand, a pen-stand, and a pair of candlesticks by the men employed at the Plaskynaston Collieries, in recognition of his services as medical officer, and with an electro-plated tea and coffee service by the members of the ambulance classes for his services as instructor.——Dr. Davidson of Wartle has, on the occasion of his golden wedding, been presented with a marble timepiece and a purse of 100 sovereigns as a mark of the esteem and respect in which he is held throughout

the district.——Mr. John Blackburn of Barnsley has been presented with a silver drinking-cup by the police of the Staincross Division of the West Riding of Yorkshire, in recognition of his services as teacher of the ambulance class.—Mr. Charles Sanders has been presented by the members of his ambulance class with a handsome edition of the works of Charles Dickens.—Mr. W. Jenner Reid has, on the occasion of his leaving Esher, been presented with an illuminated address and a purse of over fifty sovereigns by the inhabitants of that village, as a token of their regard and regret at his departure.—On the 28th ult. Mr. Jordan Lloyd was presented, as a wedding present, with a cheese dish and a butter cooler by the sisters and nurses of the Birmingham Queen's Hospital, and also by the past and present resident officers of the institution, who had been associated with him in the work of the hospital, with a silver salver and an illuminated address.

THE Jubilee celebration of the National Hospital for the Paralysed and Epileptic (Albany Memorial), Queen-square, will take place on July 7th, when the Duchess of Albany will open the wards hitherto unoccupied, including the ward for children which bears her Royal Highness's name, thus raising the total number of available beds to 180. A show of roses and other flowers by Paul and Son, of Waltham-cross, with additional attractions, will be provided.

ON the 27th ult. an alarming and destructive fire occurred at the private asylum known as Brooke House, Clapton High-road. One of the inmates was, unfortunately, burned to death. An inquest was held on the body of the deceased, and the jury, who returned an open verdict, appended a rider to their verdict complimenting Dr. Adams, the proprietor of the asylum, and the members of his staff for the promptitude they had displayed in endeavouring to extinguish the flames.

LONDON TEMPERANCE HOSPITAL.—The annual public meeting of the supporters of this institution was held on the 27th ult., under the presidency of the Rev. Canon Ellison. During the twelve months ending April 30th, the number of in-patients treated was 737, the deaths amounting to 57, or 8·4 per cent. During the 14 years in which the hospital has been in existence more than 4000 in- and 26,000 out-patients have been received. The income for the year was £5075, leaving after payment of expenses a balance in hand of £38. The debt on the hospital amounts to £6500, and until this is paid it is not considered prudent to open to the public the whole of the 120 beds which the building contains, of which 60 only are at present in use.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following Examiners have been elected for the ensuing year:—Anatomy: J. Barton, F. A. Nixon, W. T. Stoker, R. L. Swan. Surgery: C. B. Ball, E. S. O'Grady, W. Thomson, A. F. Tobin. Physiology and Histology: E. D. Mapother, J. A. Scott. Medicine and Therapeutics: M. A. Boyd, R. A. Hayes. Chemistry, Physics, and Medical Jurisprudence: J. D. Pratt, S. H. Webb. Midwifery and Gynæcology: J. J. Cranny, S. R. Mason. Ophthalmology: A. H. Benson, H. A. Swanzy. Diploma in Midwifery: J. J. Cranny, H. Croly, W. Roe. Public Health: E. Flinn, E. Lapper, W. Parry, H. Tweedy. Preliminary Education: F. Davys, R. Morton, H. C. Tweedy.

INSTRUCTION TO VOLUNTEER MEDICAL OFFICERS.—On Wednesday, May 25th, the last of a course of six lectures to Volunteer medical officers was delivered by Dr. Walter Pearce in the Parkes Museum. Dr. Farquharson, M.P., occupied the chair, and there was a large attendance of medical officers and of members of the Volunteer Ambulance Department. Surgeon Stewart, M.D., Middlesex Yeomanry Cavalry, moved a vote of thanks to the chairman, which was seconded by Surgeon Stokes, London Rifle Brigade. Dr. Farquharson, in reply, said that he took much interest in the subject of the lecture, especially in the rations of the soldier. He hoped that ample opportunity would be given for the discussion of the Army Medical Estimates in the House of Commons, and that he should be ready to put forward the grievances of the Volunteer regimental surgeons, and their deprivation of pay and allowances while under instruction at the Medical Staff Depôt at Aldershot.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

ANCOATS HOSPITAL, Manchester.—Junior Visiting Surgeon. Salary £30 per annum, with board and laundry service.

BIGGLESWADE UNION, BEDFORD.—District Medical Officer. Salary £120, with extra medical fees, as allowed by the Local Government Board.—Medical Officer for the Union Workhouse and Infirmary. Salary £40 a year.—Medical Officer for the Contagious Diseases Hospital. Salary £40 a year.

EAST LONDON HOSPITAL FOR CHILDREN, Shadwell, E.—Resident Clinical Assistant. Board and lodging are provided free of cost, but there is no salary attached to the post.

QUEEN'S HOSPITAL, Birmingham.—Honorary Surgeon.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Brighton.—Assistant Physician.

ROYAL UNITED HOSPITAL, Bath.—Resident Medical Officer. Salary £100 per annum, with board and lodging.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL, King William-street, West Strand, W.C.—House-Surgeon.

STAINES UNION.—District Medical Officer. Salary £85 per annum, exclusive of the authorised fees for surgical and midwifery cases.

TOWNSHIP OF TOXTETH-PARK, Liverpool.—Assistant Medical Officer for the Workhouse and Infirmary. Salary £100 per annum, with rations of a first-class officer and separate apartments.

VICTORIA HOSPITAL FOR CHILDREN, Queen's-road, Chelsea, S.W.—Resident Medical Officer. An honorarium of £20 for the first six months, and £30 for the second six months, will be given, and lodging in the hospital provided.

WESTMINSTER HOSPITAL, S.W.—Assistant Surgeon.

WHITEHAVEN AND WEST CUMBERLAND INFIRMARY.—House-Surgeon. Salary £120 per annum, and £30 a year for dispensing, with furnished apartments and attendance.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

BARNARD, ARTHUR JOYNSON, M.R.C.S., L.R.C.P., has been appointed Senior House-Surgeon to the Royal Albert Edward Infirmary, Wigan, Lancashire, vice John Buchanan, M.D., resigned.

BIDWELL, L. A., M.R.C.S., L.S.A., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

BOND, W. A., M.A., M.D., B.C.Cantab., has been appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

BOWEN-JONES, L.M., M.R.C.S., L.R.C.P.Lond., has been appointed Physician to the Carmarthenshire Infirmary, Carmarthen.

BROOK, W. F., M.R.C.S., L.S.A., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

BROWN, C., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

BULSTRODE, H. T., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Throat Department of St. Thomas's Hospital.

CALVERT, J. T., L.R.C.P., M.R.C.S., has been reappointed Clinical Assistant in the Skin Department of St. Thomas's Hospital.

CLARKE, THOMAS, L.R.C.P.Ed., L.F.P.S.Glas., has been reappointed Medical Officer of Health for the Pewsey Rural Sanitary District.

DUNCAN, H., L.R.C.P., M.R.C.S., has been appointed Clinical Assistants in the Skin Department of St. Thomas's Hospital.

EDWARDS, WILLIAM LLOYD, M.R.C.S., L.R.C.P. Lond., has been appointed Physician to the Carmarthenshire Infirmary, Carmarthen.

ELLIS, DONALD M., M.R.C.S., L.R.C.P.Ed., has been appointed House-Surgeon to the Teignmouth Infirmary and Convalescent Home, vice A. D. Owen, M.R.C.S., L.S.A., resigned.

HALL, H. S., M.R.C.S., L.R.C.P., has been appointed Junior House-Surgeon to the Royal Albert Edward Infirmary, Wigan, Lancashire.

HARRIS, ARTHUR W., M.R.C.S., L.S.A., has been appointed Assistant Medical Officer to the Infirmary of the Holborn Union.

HAWKINS, H. P., M.R.C.S., L.S.A., has been appointed Resident House-Physician to St. Thomas's Hospital.

HESLOP, WILLIAM JOHN, L.K.Q.C.P.I., F.R.C.S.Ed., has been appointed Medical Officer of Health for the Stretford Urban Sanitary District, vice Pettinger, deceased.

HINNELL, J. S., M.R.C.S., L.S.A., has been appointed Ophthalmic Clinical Assistant to St. Thomas's Hospital.

HUTTON, J. S., M.B.Lond., L.R.C.P., M.R.C.S., has been reappointed House-Surgeon to St. Thomas's Hospital.

JONES, H. S., L.R.C.P., M.R.C.S., L.S.A., has been appointed Clinical Assistant in the Ear Department of St. Thomas's Hospital.

LESLIE, W. MURRAY, M.B., C.M.Ed., has been appointed Public Vaccinator to the Poplar Union.

MACKVOY, H. J., L.R.C.P., M.R.C.S., has been appointed Resident House-Physician to St. Thomas's Hospital.

MACKINTOSH, ANGUS, M.D., L.F.P.S.Glas., has been reappointed Medical Officer of Health for the Chesterfield Rural Sanitary District.

MCLEAN, CHARLES J. R., M.B., C.M.Ed., has been appointed Medical Officer of Health for Yeadon, near Leeds.

MASTERMAN, GEORGE FREDERICK, L.K.Q.C.P.I., M.R.C.S., has been reappointed Medical Officer of Health for the Stourport Urban Sanitary District.

NISBET, J. TAWSE, M.B., C.M.Ed., has been appointed Honorary Assistant Medical Officer to the Liverpool Infirmary for Children.

SANSOM, H. A., L.R.C.P., M.R.C.S., has been appointed Assistant House-Physician to St. Thomas's Hospital.

SMYTH, H. J., L.R.C.P., M.R.C.S., has been appointed Non-Resident House-Physician to St. Thomas's Hospital.

SOLLY, E., L.R.C.P., M.R.C.S., L.S.A., has been appointed Resident Accoucheur to St. Thomas's Hospital.

STAPLE, JAMES D., M.R.C.S., L.S.A., has been appointed Assistant House-Surgeon at the Stockport Infirmary, Stockport, vice A. J. Turner, M.D.Lond., M.R.C.S., resigned.

STAVELEY, W. H. C., L.R.C.P., M.R.C.S., has been appointed House-Surgeon to St. Thomas's Hospital.

STEVENSON, ROBERT, L.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Third District of the Hunslet Union.

SUTTON, THOMAS S., M.R.C.S., L.S.A., has been appointed Medical Officer for the Second District of the Bridge Union.

WHITE, ERNEST WILLIAM, M.B.Lond., M.R.C.P.Lond., M.R.C.S., has been appointed Resident Medical Superintendent of the City Lunatic Asylum, Stone, vice Jepson, resigned.

WINFIELD-ROLL, G., M.B., B.C.Cantab., L.R.C.P., M.R.C.S., has been appointed Ophthalmic Clinical Assistant to St. Thomas's Hospital.

Births, Marriages, and Deaths.

BIRTHS

BIGGER. — On the 26th ult., at Queen's-park-gardens, Streatham-common, the wife of W. G. Bigger, M.B., M.Ch. Roy. Univ. Irel., M.R.C.S., of a daughter.

CRAWSHAW.—On the 25th ult., at 23, Trafalgar-square, Ashton-under-Lyne, the wife of S. Crawshaw, M.R.C.S.Eng., of a son.

CRITCHETT.—On the 29th ult., at 21, Harley-street, W., the wife of Anderson Critchett, of a daughter.

DAVIES.—On the 22nd ult., at Delabeche-street, Swansea, the wife of W. T. F. Davies, M.B., B.S.Lond., of a son.

GILBART-SMITH.—On the 22nd ult., at Harley-street, W., the wife of T. Gilbart-Smith, M.D., of a son (prematurely).

RAW. — On the 28th ult., at Rutland House, Oakfield-road, Anerley, S.E., the wife of William E. St. M. Raw, L.R.C.P., M.R.C.S., L.S.A., of a daughter.

RIVINGTON.—On the 31st ult., at Finsbury-square, the wife of Walter Rivington, B.A., M.B., M.S.Lond., F.R.C.S., of a son.

STEAVENSON.—On the 27th ult., at 39, Welbeck-street, Cavendish-square, the wife of W. H. Steavenson, M.D.Cantab., of a son.

TWEEDY. — On the 24th ult., at Gardiner's-row, Dublin, the wife of H. C. Tweedy, M.D., of a son.

WHITTLE. — On the 30th ult., at 65, Dyke-road, Brighton, Elizabeth, wife of Ed. Geo. Whittle, M.D.Lond., of a daughter.

MARRIAGES.

KENYON—LAW.—On the 26th ult., at St. Matthew's Church, Cheltenham, John Edward Kenyon, F.R.C.S., to Georgina Elizabeth, eldest daughter of the late Rev. Henry Law, Vicar of Chepstow, Monmouthshire.

LLOYD—HAMPSON-SIMPSON. — On the 1st inst., at Edgbaston Parish Church, by the Rev. Cresswell Strange, M.A., Vicar, Gordon Lloyd, M.S., F.R.C.S., of 22, Broad-street, Birmingham, to Marian (Minnie), eldest daughter of Mercer Hampson-Simpson, Esq., of Priory-road, Edgbaston.

STOCKER—HODGKINSON.—On the 2nd inst., at St. Luke's, Westbourne-park, by the Rev. R. J. Knowles, M.A., Vicar, George Bertram, youngest son of the late James Stocker, Esq., of Guy's Hospital, to Alice Mary, eldest daughter of the late Lieut.-Col. Cadman Hodgkinson, 28th Regiment, Bombay Native Infantry.

STURRIDGE—HAMER.—On the 2nd inst., at Wallasey Church, Cheshire, by the Rev. A. E. P. Gray, Peter Frederick Sturridge, M.R.C.S., L.R.C.P., of Kendal, to Mary Ada, second daughter of Charles Marshall Hamer, of Liscard, Cheshire.

DEATHS.

CHEESE.—On the 30th ult., at The Terrace, Hurlingham-lane, Fulham, Frederick Cheese, M.R.C.S., aged 47.

COATES. — On the 29th ult., at Dunedin, Bournemouth, Gilbert Herbert, seventh son of the late W. Martin Coates, aged 31.

COOK. — On the 28th ult., at Chepstow-place, Bayswater, John Henry Cook, M.D. (formerly of the Minories).

GAMMIE.—On the 20th ult., at Stanhope-gardens, Queen's-gate, S.W., Patrick Gammie, M.R.C.S., Surgeon-General, aged 73.

MILNE.—On the 27th ult., at Bridge of Allan, N.B., Henry Milne, M.D., late of Banff, N.B., in his 76th year.

PRITCHARD. — On the 21st ult., at Hastings, George F. Pritchard, L.K.Q.C.P.I., M.R.C.S., of Bruson House, Teynham, Kent, aged 47.

VOGAN.—On the 24th ult., at St. Mary Elms, Ipswich, after a short illness, Emma Jane, the beloved wife of James Norman Vogan, F.R.C.S., in her 22nd year.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, June 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE. — Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITALS.—Operations, 2 P.M., and each day in the week at the same hour.

ANATOMICAL SOCIETY OF GREAT BRITAIN AND IRELAND. — 5 P.M. Meeting at the Medical Society of London, Chandos-street, Cavendish-square, W. Report of Committee and Election of Officers.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Mr. F. Henri Weiss: On the Destruction of a Permanent Tooth Pulp by an Alveolar Abscess attached to a Deciduous Molar. — Mr. Storer Bennett: (1) Dental Abnormality in a Lower Jaw from a subject who is supposed to have lived in the Stone Age; (2) Extraordinary Example of Perverted Tooth Development.—Mr. Bridgman: Case of Irregularity.—Prof. Victor Horsley: Epileptiform Neuralgia of the Fifth Nerve treated by Avulsion of the Nerve.

Tuesday, June 7.

GUY'S HOSPITAL.—Operations, 1.30 P.M. and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 1.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M.

ROYAL INSTITUTION.—3 P.M. Rev. J. P. Mahaffy: The Hellenism of Alexander's Empire—Macedonia and Greece.

Wednesday, June 8.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M.; Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9 A.M.; Saturday, same hour.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Christopher Heath: Certain Diseases of the Jaws—Cystic Diseases of the Jaws.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. G. Massee: Monograph of the Genus Lycoperdon. — Profs. T. Rupert Jones and C. D. Sherborn: Remarks on the Foraminifera, with especial reference to their Variability of Form, illustrated by the Cristellarians.

EPIDEMIOLOGICAL SOCIETY OF LONDON. — 8 P.M. Annual General Meeting. Dr. George Turner: Diphtheria.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Drs. R. T. Smith, Edis, Granville Bantock, and others.—Mr. Lawson Tait: The Principles of Flap-splitting in Plastic Surgery.

Thursday, June 9.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Rev. J. P. Mahaffy: The Hellenism of Alexander's Empire—Egypt.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM. — 8.30 P.M. Living and Card Specimens at 8 P.M.:—Mr. W. J. Collins: Extensive Hæmorrhage into Blind Eye with Coarctation of Retina.—Mr. Higgens: Unusual Form of Coloboma of Iris.—Mr. G. E. Walker: (1) Sequel to case of Exophthalmos; (2) Sequel to case of Cyclotomy in Glaucoma.—Mr. Story: Experimental Demonstration on the Pathology of Glaucoma.—Mr. Silcock: Sequel to case of Central Choroidal Hæmorrhage. Papers:—Mr. Story: Case of Complete Blindness of Right Eye with Temporal Hemianopsia of Left Eye.—Mr. Hill Griffith: On the Permeability of the Suspensory Ligament by Organised Substances.—Mr. Brailey: Recurrent Chorioido-Retinitis in region of Macula Lutea.—Mr. Nettleship: Two cases of Quinine Amblyopia.

Friday, June 10.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Christopher Heath: Certain Diseases of the Jaws—Tumours of the Jaws.

ROYAL INSTITUTION.—9 P.M. Mr. Thomas Hodgkin: Aquileia the Precursor of Venice.

Saturday, June 11.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Rev. J. P. Mahaffy: The Hellenism of Alexander's Empire—Syria.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, June 2nd, 1887.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 27	29·97	N.	47	46	...	54	45	·17	Raining
,, 28	29·92	N.	52	50	78	58	47	·10	Overcast
,, 29	29·94	N.E.	52	49	83	59	46	·04	Overcast
,, 30	30·01	E.	53	51	75	62	47	·02	Overcast
,, 31	30·08	E.	56	54	111	70	51	...	Cloudy
June 1	29·96	E.	55	53	93	65	50	·02	Overcast
,, 2	29·77	E.	52	50	...	56	50	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

MEDICAL STUDENTS AND THE JUBILEE.

ON the occasion of the recent celebration of the birthday of the Emperor of Germany the students of Berlin turned out in force to show their loyalty to their sovereign. In a few days we shall be celebrating the completion of our Queen's fifty years' reign; but as yet we have not heard that the medical students of London, a large and important part of the community, are making any attempt to take formal part in the celebration. Our attention has been called to this omission by two correspondents, who suggest that a congratulatory address be drawn up and signed; that the students of all the hospitals should turn out in evening dress, with white flowers in their button-holes, and should march in procession to Her Majesty, drawing up outside the palace; and that a deputation consisting of one representative from each hospital should present the address, the whole force, on the return of the deputation, giving three cheers for their Queen. If anything of this sort is to be done, there is no time to be lost. What is done must be done promptly. The idea is worthy of consideration.

Justice.—A medical man under promise not to practise as a surgeon and apothecary within ten miles of a given centre is clearly also prevented from practising as a *physician*, a term which does not now bear the restricted meaning which it had fifty years ago, but embraces a great part of the cases of ordinary practice.

Beta.—The qualifications mentioned are sufficient for the recovery of midwifery fees, either singly or combined.

Junior.—Nothing is definitely known on the points mentioned.

THE INCOME TAX.

To the Editors of THE LANCET.

SIRS,—I wish to get information on the following point, and perhaps some of your readers may be able to help me. I took over a practice in the autumn of last year, but did not take the book debts with it. Notwithstanding this, the surveyor of taxes required me to pay half my predecessor's income tax; but I refused to do so. He then called upon me to give a statement of my book debts, though my bills cannot be sent out till midsummer, and on this return, when he gets it, he proposes to base his assessment. I should say my actual receipts for six months ending March 31st are less by £10 than the working expenses. Can I be required to pay on debts that have not yet been claimed, but on which when paid I shall have to pay income tax for the year following? What is the best course to take?—I am, Sirs, yours obediently,

May, 1887. A COUNTRY PRACTITIONER.

THE CASE OF MR. CHARLES GAFFNEY.

DR. GLOVER begs to acknowledge the receipt of the following sums towards helping the Misses Gaffney in maintaining their brother:—J. G. G., £2 2s.; J. A., £1 1s.; H. S. H., £1 1s.; Omega, 10s.

Mr. G. Schofield (Bournemouth).—The appointment is not a public one.

TREATMENT OF TÆNIA SOLIUM.

To the Editors of THE LANCET.

SIRS,—In answer to "Puzzled," I beg to forward the following observations:—

During my stay in South Africa I treated many cases, myself included, and always with success. The great point in the treatment of tapeworm is to expose the head, which is attached to the intestine by its booklets. So long as the head be covered with faeces no medicine will do much good. My treatment is as follows:—The day before giving the worm medicine I allow no food of any kind except plain beef tea, or other very thin soup, and very little even of these. The first morning I give one drachm of compound jalap powder, which generally operates three or four times during the day, and effectually clears out the bowels, bringing away at the same time large portions of the worm. The patient of course, keeps quiet in the house. On the second morning, on an empty stomach, I give a draught consisting of from two to three drachms of oil of turpentine and one drachm of oil of male fern in sweetened emulsion. After an hour or so I give a dose of castor oil. It will not be long before the whole of the worm with its head will have passed, which will be found on proper examination of the stools. The patient can then take his usual diet, and the following day will be well. I have never known this treatment to fail. The above doses, of course, are intended for adults. The frequent failure of the oil of male fern as an anthelmintic is, I believe, attributable to the smallness of the dose exhibited, less than a drachm for an adult being useless. I may here state that I believe every native in South Africa to be infected with one or two tapeworms. I am, Sirs, yours faithfully,

Cheltenham, May, 1887. FRED. A. A. SMITH, M.D.

To the Editors of THE LANCET.

SIRS,—In reply to "Puzzled" I write to say that it is useless to rely upon any of the reputed remedies for tapeworm, unless the patient is in the first place well purged, and afterwards properly dieted. The plan I have adopted, and which I have never found to fail, is, supposing the patient to be an adult male, to give an ounce of castor oil; this clears the intestines, so that the worm has nothing to hold on to. For the next twenty-four hours feed the patient on beef-tea, gruel, raw eggs, allowing neither milk nor anything solid. Then give one drachm of oil of male fern emulsified with yelk of egg and a little syrup and gum, eight hours after which give another dose of castor oil. This removes the parasite without distressing the patient. Should the dose of male fern be vomited, before repeating it apply a mustard and linseed meal poultice to the epigastrium. By the above treatment I recently ejected a tenant of nine years' residence.—I am, Sirs, yours obediently,

May 30th, 1887. E. W., L.S.A. &c.,

To the Editors of THE LANCET.

SIRS,—In reply to the letter in your issue of May 28th regarding the non-success of the various remedies for tænia solium prescribed by "Puzzled," permit me to recommend my prescription and after-treatment for the entire expulsion of tænia with its head. The patient, an adult, is to take the following draught on awakening about 4 o'clock in the morning:—Six drachms of castor oil, one drachm of oil of male fern, fifteen minims of liq. potassæ, and ten minims of spirit of peppermint. For breakfast a small plate of Scotch porridge and a cup of hot tea. By following this treatment twice a week he will succeed after the third or fourth draught in expelling the worm with its head.

I am, Sirs, yours obediently,

Manchester, June 1st, 1887. H. R. H. PEARE, L.K.Q.C.P.I., &c.

To the Editors of THE LANCET.

SIRS,—Your correspondent, "Puzzled," should starve his patient for so many hours, say seven. Kill the worm at bedtime with a full dose of fresh male fern—a drachm. Empty the bowels next morning with a large dose of castor oil. Allow the patient to drink tea without milk and sugar till the bowels have well acted. Afterwards, in four hours, sanction a plate of mashed potatoes. Repeat this twice during three days. After a short interval of a few days repeat again, and if necessary again. This plan I have on several occasions found to be a certain remedy; but it must be carried out most rigidly. It is what all practical physicians would recommend. I am, Sirs, yours faithfully,

Baschurch, May 29th, 1887. J. P. BRISCOE.

To the Editors of THE LANCET.

SIRS,—In Dr. Lionel S. Beale's work "The Microscope in Medicine" there is a section headed "Means of Procuring the Head of the Tapeworm." I followed these directions closely, while I bore in mind the caution given by Dr. T. Spencer Cobbold in his book on "Worms," where he says: "The important thing is to be sure that your pharmaceutical preparations are the very best that can be made. Inferior drugs will cause you much disappointment." I had my oil of male fern freshly made by one of our best chemists, and administered in this case two drachms, with the desired result. I am, Sirs, yours very truly,

Brighton, May 28th, 1887. F. J. SPRANGER.

HOUSE SANITATION.

Mr. R. Fitzroy Benham calls attention to the existing method of construction of houses which allow smells to pass from the basin of the watercloset when it is used, beneath the seat, and travel along the joists into other parts of the house, and he suggests the rim of the basin being provided with an indiarubber lining which would effectually block up the space intervening between the seat and the rim.

Dr. J. B. Macnaughton.—The coroner certainly acted within his legal rights in ordering another medical man to make the post-mortem examination. We are inclined to think that whenever the death seems not improbably due to violence, it is well that the responsibility should be shared by two medical men, especially as the gentleman in charge of the case during life might be charged by unscrupulous or careless persons with having acted in other than the best interests of the patient. We advise our correspondent to view this case in a philosophical spirit.

One of them.—As the Medical Register was published on April 29th, clearly not "one of them"—new members of the College of Surgeons—in the list of May 7th could appear.

NEW SOUTH WALES.

To the Editors of THE LANCET.

SIRS,—In reply to the questions asked by "Viator" in your issue of May 28th, I beg to state that there are no peculiar endemic or epidemic diseases in New South Wales. Nearly all the diseases prevalent in Great Britain are met with in practice, but the general mortality is low. Typhus fever and small-pox are unknown, except when accidentally introduced by immigrants. Sydney had a short epidemic of small-pox lately produced in this way. Typhoid fever is rather prevalent, and there have been various severe epidemics of scarlatina and measles. Diphtheria is relatively common. Respiratory disease is decidedly less frequent than in Great Britain, whereas diseases of the nervous and digestive systems exceed the home average. Parasitic disease, especially hydatids, is common. Snake-bite is, perhaps, the only unfamiliar affection which the practitioner is called upon to treat. The mortality from it is low compared with the number of accidents reported. The chief towns are well supplied with all the requisites of practice, but the prices charged are high. Your correspondent would do well to go out thoroughly equipped with the usual *armamentarium*, but no special selection of drugs or instruments need be made. The conditions of practice vary much according as the practitioner settles in one of the large towns or in a rural district. In the former case medical life and practice do not differ materially from the experience of the home country. In the latter case the practitioner must carry with him such accessories of civilisation as may be necessary for comfort and medical practice. I am, Sirs, yours faithfully,

Belfast, May, 1887. JAMES ALEX. LINDSAY, M.A., M.D.

In reference to one part of "Viator's" query, Messrs. Mayer and Meltzer of Great Portland-street write that they have a branch establishment in Melbourne, where surgical instruments of all kinds may be obtained.

PLACENTA PRÆVIA.

To the Editors of THE LANCET.

SIRS,—Mr. Logan's case in THE LANCET of May 20th has induced me to send you the following, should you deem it of sufficient interest for insertion.

On April 28th last I was called to a primipara aged about twenty-six. On arrival I found the patient in bed, looking and feeling remarkably well. I was told that the contents of the uterus had been expelled. On examination I found the vagina perfectly free from blood clot; in fact, my digit was not even stained with blood. The vaginal canal was somewhat tightly contracted. In the chamber vessel there was a fœtus between four and five months old, with the placenta attached to the vertex. The head was exceptionally large. There was a very slight sanious discharge for two or three days after this. I may mention that the menstrual discharge had been always very scanty and that three weeks previously to the miscarriage the patient fell into a small brook; the accident, however, gave rise to no unpleasant symptoms more than the shock at the time. As the peculiarity of the attachment of the placenta and the entire absence of hæmorrhage at birth were unique in my experience, I thought the case might be of interest to the profession.—I am, Sir, yours faithfully,

Wadebridge, May 28th, 1887. F. G. STEWART, M.R.C.S., L.S.A.

THREADWORM.

To the Editors of THE LANCET.

SIRS,—In the case of your correspondent, "M.R.C.S.," perhaps the vagina is a nidus for this worm, the oxyuris vermicularis, presuming the patient to be a female. If so, the vagina should be washed with a carbolic lotion, any ulceration of the os uteri treated with $AgNO_3$, the perineum anointed with a carbolic or mercurial ointment, as a poison to these migratory creatures, and a rectal injection of iron, salt, quassia, or oakbark employed, coupled with the administration of iron and bark internally and an occasional purge. The diet to be regulated. Such vegetables as greens are to be avoided.

I am, Sirs, yours faithfully,

Baschurch, May 20th, 1887. J. F. BRISCOE.

THE CHINA MEDICAL MISSIONARY JOURNAL.

THE Medical Missionary Association of China has commenced to issue a quarterly journal, which, if we may judge by the first number, will contain a good deal of valuable scientific matter, connected especially, of course, with the Oriental aspects of disease, in addition to articles of missionary interest. The columns of the journal are, we are glad to note, by no means confined to missionaries, but are equally open to all qualified practitioners in China. A space is also reserved for articles in the Chinese language. From a list given there appear to be at present seventy-nine medical missionaries in China, Corea, and Siam, belonging to twenty different societies. The majority are Americans, but thirty-three are British subjects. Fifteen ladies, thirteen of whom are Americans, are included in the list. The Rev. L. H. Gulick, M.D., of Shanghai, may be addressed for further information concerning the association.

Four y Fureoir, and D.—Application should be made to the Directors or Commissioners of Prisons, and the appointments are in the hands of the chairman, Sir E. Du Cane.

Mr. T. L. Horner.—Heath's Operative Surgery; Stephen Smith's Principles and Practice of Operative Surgery.

THE COMMEMORATION OF THE QUEEN'S JUBILEE BY THE MEDICAL PROFESSION.

To the Editors of THE LANCET.

SIRS,—I have been waiting to see if any of the leading members of our profession would begin some movement to commemorate the jubilee of Her Most Gracious Majesty the Queen, and that would also at the same time have the effect of benefiting the less fortunate members of the profession to which we belong, but up to the present time I have seen no sign of anything being done in that direction. I know that it is from no want of loyalty that the members of the medical profession have so far not taken combined action to mark their high regard for the jubilee of our beloved Queen in some practical and solid way, but I believe it is because they are waiting for someone to initiate a movement that would recommend itself to their approval for that purpose. There is scarcely a week passes but that an appeal is made to the profession for assistance on behalf of some "object of charity" belonging to our body by reason of old age, sickness, misfortune, or death, and knowing this, and seeing that the various sections of the community are vieing with each other to celebrate the Queen's Jubilee in some substantial form, I venture to ask you to lend your aid and influence to bring about such a movement that will be creditable to our profession and a great gain to those who have particular claims upon our sympathies, and who look to us to smooth some of the rough places of this life, and aid them in procuring the creature comforts to make life bearable. When we take into account the number of members (16,000) belonging to the medical profession in this country, and know the great want there is of help for the sick and needy amongst them and their families, I cannot but think that it only requires your help in pointing out the duty of our members to do something worthy of our noble profession to alleviate the wants of our less fortunate brethren in order to secure its accomplishment. We see what can be done by united action in raising money by such examples as those of the committees of the "Women's Jubilee Offering to the Queen"; and I think we have sufficient men of influence amongst us who might be prevailed upon to act as a central committee, and to call meetings of our professional brethren in every town throughout the kingdom in order to raise subscriptions for the purpose I have indicated; and I believe if that were done the results would be most satisfactory. When we see the number of almshouses that are empty at Epsom solely through the want of funds, and that the number of applicants for pensions, &c., is so much in excess of the funds that are at the disposal of the Medical Benevolent Society in connexion with the college at Epsom, I think it is quite time we were up and doing. If the matter is thoroughly taken in hand, I feel sure that before many months are past we should be in a position to go to the head-master of the college at Epsom and ask his advice as to how to expend a sum of £10,000.

I now, Sirs, leave the matter in your hands, and ask your powerful aid in furthering this much-needed object; and there can be no doubt that the success of such a movement would not only be a wise and beneficent act to testify our loyalty and appreciation of the blessings conferred upon our country during the reign of our gracious Sovereign, but would also be an honour to our profession and a means of rendering assistance and conferring comfort and happiness on many. I shall be glad to give ten guineas towards any fund that may be begun in connexion with the Medical College at Epsom.

I am, Sirs, yours faithfully,

Mirion House, Crewe, May 18th, 1887. JAMES ATKINSON.

"CHRONIC RHEUMATIC ARTHRITIS."

To the Editors of THE LANCET.

SIRS,—I would recommend your correspondent who signs himself "Medicus" in THE LANCET of to-day to try the following treatment in the case he mentions:—Five-drop doses of tincture of iodine three times a day, and coca wine at night to promote sleep. I have found coca wine very useful in cases where opium is contra-indicated.

I am, Sirs, yours truly,

Bridgend, May 28th, 1887. W. EDMUND THOMAS, L.R.C.P., &c.

WANT OF A CHINESE MEDICAL DICTIONARY.

A WANT has long been felt of a dictionary of medical terms for all China, the words employed in one part of the empire often conveying no meaning to those living in another part. Thus a Chinaman from the north is said to have hunted all over Canton and Hong Kong for iodide of potassium without being able to make anyone understand what he wanted.

Mr. A. E. Barker.—A proof of the paper will be forwarded in the course of a few days.

Dr. Mc Clure (Cromer).—The paper has been received and will be published shortly. The other case mentioned may be forwarded.

CONVERTIBLE CARRIAGE.

To the Editors of THE LANCET.

SIRS,—I have lately had a carriage built which presents some peculiarities which may be interesting to your readers. By various alterations it can be turned into a brougham, single seated; a victoria, with hood; or a park phaeton, each complete in itself. The alteration from victoria to park phaeton can be accomplished in about two minutes, and that from victoria to brougham in a little longer space of time. The advantages gained are, of course,—(1) that for the price of one carriage I have three; (2) that no more room in stable is required than for one carriage; (3) that I can vary my vehicle according to the weather, and either drive myself in the park phaeton or be driven in the victoria or brougham; and (4) only one tax for three carriages. There is nothing in the victoria or park phaeton that looks different from the ordinary carriages of this type. In the brougham the only discernible difference is that the wings are retained. I shall be happy to show any of your readers the metamorphosis, which I can strongly recommend for medical men, especially for those whose income is not in proportion to their desires. I am, Sirs, yours faithfully,

A. GEORGE BATEMAN, M.B.

Longridge-road, S. Kensington, May 30th, 1887.

A Guy's Man cannot be blamed for not going to a case against the wish of the parents.

H. B.—It is better to follow the custom heretofore observed in the place.

"A NEW UVULATOME."

To the Editors of THE LANCET.

SIRS,—I have only just been able to procure a copy of Mathim's Catalogue, in which Dr. Warren says is depicted a uvulatome invented by him in 1855, and precisely similar to that claimed as my invention in THE LANCET of May 7th. His instrument appears to be constructed on the principle of flower-scissors, with a slight curve *downwards*, thereby exposing a wide cut surface anteriorly. This is exactly what my instrument would avoid.

I am, Sirs, yours faithfully,

GREVILLE MACDONALD, M.D. Lond.

Upper Wimpole-street, W., May, 1887.

Mr. E. B. Williams will see by a general notice which appears weekly in our columns that we do not undertake to return MSS. not used.

"SWEATING OF THE FEET."

To the Editors of THE LANCET.

SIRS,—"A Sufferer" asks, in your last issue, for a remedy for the above. Presuming that there is no obvious cause for the sweating, and that it is confined to the feet, your correspondent will derive considerable benefit, if not absolute cure, from the use of digitated wool socks and felt cloth shoes. I am, Sirs, yours faithfully,

May 30th, 1887. BERNARD O'CONNOR.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Hulke, London; Sir W. Mac Cormac, London; Dr. L. Marshall, Nottingham; Dr. J. W. Ogle, London; Sir G. Young, London; Mr. E. Treacher Collins, London; Dr. Alder Smith, London; Mr. C. E. Harrison, London; Dr. Ledlard, Carlisle; Mr. Trimmer, London; Dr. Harry Campbell, London; Mr. N. Porrit, Huddersfield; Dr. G. Macdonald, London; Mr. Pearce, Manchester; Messrs. W. & F. Thorn, London; Mr. F. G. Stewart, Wadebridge; Dr. W. Pearce, London; Dr. Beaven Rake, Trinidad; Mr. T. L. Horner, Malta; Messrs. Shillingford and Co., Bicester; Dr. F. A. A. Smith, Cheltenham; Messrs. Toeplitz and Deuticke, Vienna; Mr. Firth, Dagshal; Mr. Spranger; Dr. Dorabjie Hormusjie, London; Mr. J. F. Briscoe, Baschurch; Messrs. Barton and Co., Congleton; Mr. W. E. Thomas, Bridgend; Messrs. Wilson and Darter, London; Mr. Ralph, Burton-on-Trent; Messrs. Warner and Sons, London; Dr. Lindsay, Glasgow; Mr. Morrison, Bishop Auckland; Dr. J. B. Macnaughton, Deptford; Messrs. Maclachlan and Co., Edinburgh; Dr. W. Hitchman, Liverpool; Messrs. Condy and Co., London; Dr. F. J. Smith, London; Dr. Jas. More, Rothwell; Mr. A. G. Bateman, London; Mr. Gorsuch, London; Dr. Fortescue Fox, Strathpeffer; Mr. C. B. Westwood, London; Messrs. Hooper and Co., London; Dr. C. F. Knight, Dublin; Dr. C. Holman; Mr. F. R. Humphreys, London; Mr. H. Michie, Nottingham; Messrs. Boulton and Paul, Norwich; Dr. T. Savage, Birmingham; Messrs. Fletcher and Co., Holloway; Mr. Mackinlay, Stockton-on-Tees; Mr. Freeman, Bath; Mr. Barrett, London; Mr. Laudon, Birmingham; Dr. Taylor, Windermere; Dr. Purcell, London; Mr. Legge, Aberystwyth; Mr. B. Relton, Rugby; Mrs. Spreat, St. John's-wood; Mr. Moulding, Liverpool; Dr. Hicks, Hendon; Mr. Allen, Liverpool; Mr. Tunnicliffe, Hanley; Mr. Chapman, Bostock; Miss Terrell, Barnet; Mr. Lanrond, Glasgow; Mr. Crewes, Truro; Dr. Young, Manitoba; Mr. Kirkby, Leeds; Mr. Dawson, Bangkok; Dr. Gerrard, London; Mr. Mackinlay, London; Mr. Smith, Kennetty; Mr. Davis, London; Rev. A. Tooth, Croydon; Mr. Evans, Biggleswade; Mr. Shroster; Messrs. Lee and Nightingale, Liverpool; Mr. Baron, Manchester; Messrs. Hopkinson and Co., Notts; Mr. Groves, Dorchester; Mr. Pike, Loughborough; Mr. T. Cook, London; Mr. Knightley, London; Dr. J. F. Walker, Spilsby; A Town Councillor; C. D.; Physician, Southsea; Justice; M.D., M.R.C.S.; R. E. W.; J. W. W., Leicester; E. W., L.S.A.; Fluorine.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Wise, London; Mr. Tunmer, Harrogate; Mr. Forster, Leigh; Messrs. Read and Co., Bristol; Mr. Logan, Newcastle-on-Tyne; Mr. Gardner, South Australia; Mr. Carter, London; Mr. Beech, Hanley; Messrs. Tayler and Co., London; Mr. Davis, Worcester; Mr. Williams, Abertillery; Mr. Griffith, London; Mr. Whitmore, London; Miss Guinness, Maidstone; Dr. Blandford, London; Mr. Guest, Darlington; Mr. Knight, Dublin; Mr. Carmont, Dumfries; Mr. Silcock, Bath; Messrs. Roberts and Co., London; Mr. Hedden, Welcombe; Mr. Pryce; Dr. Williams, Truro; Mr. Sturridge, Kendal; Dr. Musson, Leicester; Mr. Affleck, Manchester; Mrs. Cooke, Mold; Mr. Clay, Birmingham; Dr. Reid, Tenby; Mr. Allan, Liverpool; W. C. Q.; Fell, Southport; Physician; Beta; Medicus, Nantwich; Alpha, Birmingham; Spero; B. A., Ben Rhydding; Medicus, Darnall; K., London; Savona; G. M. H.; M.B., Regent's-park; Morris, Kingsland; Viator; Nemo, Leeds; Nurse, Southport; Hollingbrook, Littleborough; T. J. C., Oldham; Surgeon, Penygraig; Fortinbras; F. G., Shrewsbury.

Lincolnshire Chronicle, Brighton Examiner, Surrey Standard, Malthusian, Reigate Journal, Dundee Advertiser, Grantham Journal, Clare Saturday Record, &c., have been received.

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